DEPARTMENT OF JUSTICE

Antitrust Division

United States of America v. Bayer AG and Monsanto Company; Proposed Final Judgment and Competitive Impact Statement

Notice is hereby given pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16(b)–(h), that a proposed Final Judgment, Stipulation and Order, and Competitive Impact Statement have been filed with the United States District Court for the District of Columbia in *United States of America* v. *Bayer AG and Monsanto Company,* Civil Action No. 1:18–cv–1241. On May 29, 2018, the United States filed a Complaint alleging that Bayer AG's proposed acquisition of Monsanto Company would violate Section 7 of the Clayton Act, 15 U.S.C. § 18. The proposed Final Judgment, filed at the same time as the Complaint, requires Bayer AG to divest a substantial collection of assets relating to seeds and traits, crop protection, and digital agriculture.

Copies of the Complaint, proposed Final Judgment, and Competitive Impact Statement are available for inspection on the Antitrust Division's website at *http://www.justice.gov/atr* and at the Office of the Clerk of the United States District Court for the District of Columbia. Copies of these materials may be obtained from the Antitrust Division upon request and payment of the copying fee set by Department of Justice regulations.

Public comment is invited within 60 days of the date of this notice. Such comments, including the name of the submitter, and responses thereto, will be posted on the Antitrust Division's website, filed with the Court, and, under certain circumstances, published in the **Federal Register**. Comments should be mailed to Kathleen S. O'Neill, Chief, Transportation, Energy & Agriculture Section, Antitrust Division, Department of Justice, 450 5th Street NW, Suite 8000, Washington, DC 20530.

Patricia A. Brink,

Director of Civil Enforcement.

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

United States of America, 450 5th Street NW, Suite 8000, Washington, DC 20530, *Plaintiff,* v. *Bayer AG,* Kaiser-Wilhelm-Allee 1, Leverkusen, Germany 51368, and *Monsanto Company,* 800 North Lindbergh Boulevard, St. Louis, MO 63167, *Defendants.*

Civil Action No.: 1:18–cv–1241
Judge James E. Boasberg

COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil antitrust action to prevent Bayer AG from acquiring Monsanto Company. The United States alleges as follows:

I. INTRODUCTION

1. Bayer's proposed $66 billion acquisition of its rival, Monsanto, would combine two of the largest agricultural companies in the world. Across the globe, Bayer and Monsanto compete to sell seeds and chemicals that farmers use to grow their crops. This competition has bolstered an American farming industry that contributes hundreds of billions of dollars a year to the economy, provides millions of jobs across the country, and ensures a safe and reliable food supply for consumers in the United States and around the world.

2. If allowed to proceed, the proposed acquisition would transform the agricultural industry and harm competition across a broad range of products. Most prominently, the acquisition would eliminate competition to develop and sell genetically modified seeds in cotton, canola, and soybeans—three of the largest crops grown in the United States—and the herbicides that are paired with these seeds to form the foundation of farmers' weed-control strategies.

3. These agricultural technologies emerged in the 1990s when Monsanto introduced ''Roundup Ready'' soybeans, which were genetically engineered to resist Monsanto's herbicide, Roundup. Monsanto's invention allowed farmers who planted Roundup Ready soybeans to spray Roundup over the top of their crops, thereby killing the weeds without harming the crops. It was a wildly popular invention; by 2005, almost 90% of U.S. soybean acres were planted with Roundup Ready seeds. In response, in 2009, Bayer launched its own ''LibertyLink'' genetically modified soybeans, which were engineered to withstand Bayer's Liberty herbicide. Both companies have introduced similar innovations in cotton and canola, generating competition that has resulted in higher crop yields, lower prices, and greater choice for American farmers. Today, Bayer's weed-control systems are the only competitive alternatives to Monsanto's Roundup Ready systems in cotton, canola, and soybeans.

4. Bayer and Monsanto also compete head-to-head to develop the next generation of transformative products, including cotton, canola, and soybean seeds with new genetically modified traits, as well as other innovative products that improve yields for farmers. This competition is central to their businesses. Monsanto's chief technology officer has said that innovation is ''the heart and soul of who we are.'' Similarly, Bayer's core strategy is to become the ''most innovative'' agricultural company in the world. Both companies invest significant sums of money into research and development and monitor each other's efforts, spurring each other to work faster and invest more to improve their offerings and develop new products. For instance, Monsanto recently developed a seed treatment product that protects crops from destructive worms called nematodes, directly challenging Bayer's historic dominance in that space. The proposed acquisition would eliminate this competition to develop new products that farmers will depend on for decades into the future.

5. The merger would also substantially lessen competition through the vertical integration of the two companies. Specifically, by combining Monsanto's strong position in seeds with Bayer's dominant position in certain seed treatments, the merger would give the combined company the incentive and ability to harm its seed rivals by raising the price of those seed treatments—a key input for genetically modified seeds. For example, today, Bayer sells the only seed treatment that effectively controls a destructive pest called corn rootworm. Because Bayer does not sell corn seeds itself, it has a strong incentive to sell that seed treatment to all corn seed companies, including Monsanto's rivals. But the merger would change the calculus for Bayer because it would now own Monsanto, the largest supplier of corn seeds in the United States. Armed with Monsanto's strong position in corn seeds, the merged company would likely charge its seed rivals more for the seed treatment, knowing that they rely on the product and would be less able to compete effectively without it.

6. Finally, the merger would eliminate head-to-head competition between Bayer and Monsanto to develop and sell seeds for five types of vegetables: tomatoes, carrots, cucumbers, onions, and watermelons. Although vegetable seeds are not genetically modified like cotton, canola, and soybeans, Bayer and Monsanto compete aggressively with one another to breed higher-quality and higher-yielding varieties.

7. By eliminating competition between Bayer and Monsanto and combining their businesses, the proposed acquisition would result in

higher prices, less innovation, fewer choices, and lower-quality products for farmers and consumers throughout the United States and around the world. To prevent those harms, this unlawful acquisition should be enjoined.

II. DEFENDANTS AND THE TRANSACTION

8. Bayer is a life-sciences company based in Leverkusen, Germany. The company employs nearly 100,000 people worldwide and has operations in almost 80 countries. Bayer has three main business lines: pharmaceuticals, which focuses on prescription medicines; consumer health, which focuses on over-the-counter products; and its agricultural business, Bayer Crop Science. Over the past decade, Bayer Crop Science has become one of the largest global agricultural companies. Today, its crop protection business is the second largest in the world, and its seeds and traits business is also among the world's largest. In 2016, Bayer Crop Science had about $12 billion in annual revenues.

9. Monsanto, based in St. Louis, Missouri, is also a leading producer of agricultural products. Monsanto employs more than 20,000 people in almost 70 countries. As noted, in the 1990s, Monsanto pioneered a revolutionary technology that enables certain crops to resist exposure to glyphosate, the active ingredient in Monsanto's Roundup herbicide. This technology propelled Monsanto's success: today, Monsanto is the leading global producer of seeds and traits and is among the world's largest producers of crop protection products. In 2017, Monsanto had almost $15 billion in annual revenues.

10. On September 14, 2016, Bayer agreed to acquire Monsanto for approximately $66 billion.

III. JURISDICTION AND VENUE

11. The United States brings this action, and the Court has subject-matter jurisdiction, under Section 15 of the Clayton Act, 15 U.S.C. § 25, to prevent and restrain Defendants from violating Section 7 of the Clayton Act, 15 U.S.C. § 18.

12. Defendants are engaged in, and their activities substantially affect, interstate commerce. Bayer and Monsanto sell agricultural products, including seeds and crop protection products, throughout the United States and the world.

13. Defendants have consented to venue and personal jurisdiction in this district. Venue is also proper under Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. § 1391.

IV. RELEVANT MARKETS

14. As noted, Bayer and Monsanto compete across a broad range of agricultural products, including genetically modified (GM) seeds and traits for row crops; crop protection products, such as herbicides and seed treatments; and vegetable seeds. The proposed acquisition would substantially lessen competition in the following 17 products:

Bayer–Monsanto: Relevant Products

GM Seeds and Traits

Cotton:
- Herbicide-tolerant traits
- Insect-resistant traits
- GM cotton seeds

Canola:
- Herbicide-tolerant traits
- GM canola seeds

Soybeans:
- Herbicide-tolerant traits
- GM soybeans

Corn:
- GM corn seeds

Crop Protection

Foundational herbicides

Nematicidal seed treatments:
- Corn
- Soybeans
- Cotton

Vegetables
- Carrot seeds
- Cucumber seeds
- Onion seeds
- Tomato seeds
- Watermelon seeds

15. Each of these products is a relevant product and line of commerce under Section 7 of the Clayton Act, 15 U.S.C. § 18. The industry views these products as separate business lines, and they satisfy the well-accepted hypothetical monopolist test in the U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, which asks whether a hypothetical monopolist likely would impose at least a small but significant and non-transitory increase in price. Such a price increase for these products would not be defeated by substitution to alternative products.

16. The relevant geographic markets in this case vary by product. For seeds and traits generally, the markets are regional because seeds are tailored to regional growing conditions (such as weather and soil type) and suppliers can charge different prices for seeds and traits to customers in different regions. With the exception of soybeans, however, virtually all of the regions affected by the merger have a similar market structure, so in this case it is appropriate to aggregate them to a national level for convenience. For soybeans, the market structure differs across regions; thus, the relevant geographic market is the southern United States, where Bayer has focused its soybean breeding program and been particularly successful.

17. For the relevant crop protection products (foundational herbicides and nematicidal seed treatments), the geographic markets are national. Bayer and Monsanto sell these products throughout the United States. In addition, these products require U.S. regulatory approval, which is expensive and time-consuming, so competition is limited to products that have obtained the necessary approvals. Similar products sold in other countries but not approved for use in the United States are not reasonable substitutes for American farmers.

18. For these reasons, in each of the relevant geographic markets for seeds and crop protection products, a hypothetical monopolist likely would impose at least a small but significant and non-transitory increase in price.

19. Most of the relevant markets are already highly concentrated, and in each market the merger would significantly increase concentration. The more concentrated a market and the more a transaction increases concentration in that market, the more likely it is that the transaction will reduce competition. Concentration is typically measured by market shares and by the widely-used Herfindahl-Hirschman Index (HHI). If the post-transaction HHI would be more than 2,500 and the change in HHI more than 200, the transaction is presumed to enhance market power and substantially lessen competition. *See, e.g., United States* v. *Anthem, Inc.,* 855 F.3d 345, 349 (D.C. Cir. 2017). Given the high concentration levels and increases in concentration in the relevant markets in this case, the proposed acquisition presumptively violates Section 7 of the Clayton Act.

A. Genetically Modified Seeds and Traits

20. Several markets in this case involve genetically modified seeds and traits. A genetic trait is simply an attribute of a plant, such as being tall, short, or leafy. Most traits derive from a plant's natural DNA. Over the last 30 years, however, a small set of highly sophisticated biotechnology firms—including Bayer and Monsanto—have successfully inserted DNA from other organisms into the DNA of certain crops, giving the crops a desirable trait associated with that non-native DNA. For example, scientists have developed traits that make crops resistant to certain

pests, allowing farmers to reduce their use of chemical insecticides. And scientists have developed herbicide-tolerant traits that make crops resistant to herbicides like Roundup, allowing a farmer to spray the herbicide over an entire field and kill the weeds without harming the crops. A genetically modified seed is simply a seed that contains DNA—and hence the desirable trait—of a different organism. Farmers have embraced this technology: today, more than 90% of the corn, soybeans, cotton, and canola seeds grown in the United States are genetically modified. These seeds provide farmers with considerable savings in labor and expense, increased yields, and reduced soil erosion by eliminating the need for tilling fields. Thus, a vast majority of farmers do not view conventional seeds as a reasonable substitute.

21. With the rise of genetically modified crops, it has also become harder for smaller companies, which lack the massive resources necessary to devote to research and development, to compete in these high-tech markets. It typically takes hundreds of millions of dollars and more than a decade to bring a genetically modified seed variety or a new pesticide to market. A company must also have access to an extensive library of high-quality seeds that are necessary for research and plant breeding. Today, such resources are increasingly controlled by four vertically integrated companies: Monsanto, Bayer, DowDuPont, and Syngenta, also known as the ''Big Four.'' Although smaller independent seed companies also sell genetically modified seeds to farmers, most of those companies license traits and seed varieties from Monsanto, limiting their ability to compete.

22. As described below, Bayer and Monsanto are close competitors in three important row crops: cotton, canola, and soybeans.

(1) Genetically modified cotton

23. Cotton is a major crop grown across the southern United States, particularly in states like Texas and Georgia. Cotton seeds are widely used in vegetable oil, packaged foods, and animal feed, and cotton fibers are widely used in clothing. In 2017, U.S. farmers planted about 12 million acres of cotton and sales of cotton seeds totaled over $800 million. For cotton, the proposed acquisition would harm competition in the markets for (1) genetically modified cotton seeds, (2) herbicide-tolerant traits for cotton, and (3) insect-resistant traits for cotton.

24. ***GM cotton seeds.*** Bayer and Monsanto have long been the two leading suppliers of genetically modified cotton seeds throughout the United States. In addition to owning critical traits (discussed below), they own extensive libraries of elite seed varieties, which are essential for developing and commercializing competitive cotton seeds. If the transaction is allowed to proceed, Bayer and Monsanto would have a combined 59% share of genetically modified cotton seeds in the United States. The post-transaction HHI would be approximately 4,100, with an increase of approximately 1,500 resulting from the transaction.

25. ***Herbicide-tolerant traits.*** Given the widespread adoption of genetically modified cotton seeds, herbicide-tolerant traits are now used on approximately 98% of the cotton acres in the United States. In 2017, Bayer and Monsanto accounted for virtually all of those acres, with about 19% of acres containing Bayer's traits and about 80% containing Monsanto's traits. The merger would thus give Bayer a monopoly in these markets: the post-transaction HHI would be approximately 9,600, with an increase of approximately 3,000. Bayer and Monsanto are also competing aggressively to develop the next generation of herbicide-tolerant cotton traits. Farmers need these innovations to combat the growing number of weeds, like pigweed, that have become increasingly resistant to glyphosate in recent years. Without the merger, these new traits would likely compete in the future.

26. ***Insect-resistant traits.*** Bayer and Monsanto also compete for sales of insect-resistant traits that protect cotton from destructive pests such as moth and bollworm larvae. In 2017, insect-resistant traits were used on approximately 88% of the cotton acres in the United States. Bayer and Monsanto accounted for approximately 85% of those acres, with about 10% of acres containing Bayer's traits and about 75% containing Monsanto's traits. The post-transaction HHI would be approximately 7,400, with an increase of approximately 1,400.

(2) Genetically modified canola

27. Canola is an important crop used in vegetable oil, packaged foods, biodiesel fuels, and animal feed. In the United States, canola is grown on approximately 1.7 million acres, mainly in North Dakota, but also in several other states. The proposed merger would harm competition in the markets for (1) genetically modified canola seeds and (2) herbicide-tolerant traits for canola.

28. ***GM canola seeds.*** In 2016, genetically modified canola seeds accounted for $83 million in sales in the United States, and virtually all canola seeds contain genetically modified traits. Bayer's canola innovations in recent years have allowed it to surpass Monsanto. In 2016, Bayer's share of genetically modified canola seeds in the United States was 60% and Monsanto's share was 14%. The post-transaction HHI would be approximately 5,600, with an increase of approximately 1,700.

29. ***Herbicide-tolerant traits.*** Bayer and Monsanto are even more dominant in herbicide-tolerant traits for canola, where they have a combined share of 95%. Virtually all canola seeds planted in the United States contain either Bayer's LibertyLink trait or Monsanto's Roundup Ready trait. For these traits, the post-transaction HHI would be approximately 9,200, with an increase of over 4,100.

(3) Genetically modified soybeans

30. After corn, soybeans are the largest crop grown in the United States. Soybeans are widely used in vegetable oil, packaged foods, and animal feed. In 2017, U.S. farmers planted almost 90 million acres of soybeans, accounting for $4.6 billion in seed purchases, and 94% of those acres contained herbicide-tolerant traits. The proposed acquisition would harm competition in the markets for (1) genetically modified soybeans and (2) herbicide-tolerant traits for soybeans.

31. ***GM soybeans.*** Since launching genetically modified soybeans in the 1990s, Monsanto has been the market leader. For years, Monsanto's only competitors were companies that relied on Monsanto for licenses to the Roundup Ready traits. Since 2009, however, Bayer has emerged as a serious threat: it has invested over $250 million to develop an independent source of soybean varieties and in 2014 launched its own soybean business, Credenz, which sells varieties that perform well in the southern United States. In 2017, Bayer had a 6% share of soybeans in that region and Monsanto had a 39% share. The post-transaction HHI in the southern United States would be approximately 2,800, with an increase of approximately 500.

32. ***Herbicide-tolerant traits.*** Bayer and Monsanto also have the leading herbicide-tolerant traits for soybeans. Monsanto's Roundup Ready trait has historically dominated sales, but in recent years Bayer's LibertyLink trait has made inroads. In 2017, Monsanto had a 67% share of U.S. sales and Bayer's share had risen to 14%. (The

remaining market participants use a post-patent version of the original Roundup Ready trait.) For herbicide-tolerant traits, the post-transaction HHI would be approximately 6,900 on a national basis, with an increase of approximately 1,900. Without the merger, competition between the two companies would likely increase: Bayer and Monsanto each have new traits in their research pipelines that would confer tolerance to additional herbicides and compete in the future.

B. Foundational Herbicides

33. In addition to competing to sell herbicide-tolerant seeds, Bayer and Monsanto also compete to sell the foundational herbicides—glyphosate and glufosinate—that are paired with these seeds.

34. Foundational herbicides are herbicides used on row crops that have two defining characteristics. First, they are ''non-selective,'' meaning that they kill all types of weeds, thus providing farmers with the broadest possible protection for their crops. In contrast, other types of herbicides are ''selective,'' meaning that they kill only certain types of weeds. Selective herbicides are often used to supplement non-selective herbicides but are not generally used in lieu of them. Second, foundational herbicides can be paired with seeds that are engineered to tolerate the herbicide. Other non-selective herbicides are not a substitute for farmers because no seeds are engineered to withstand them, so spraying those herbicides over a crop would damage it. For these reasons, farmers have no good substitutes for foundational herbicides. Today, glyphosate and glufosinate are the only two foundational herbicides, but, as discussed further below, new foundational herbicides are in development.

35. Bayer and Monsanto are the world's leading producers of foundational herbicides. As noted above, glyphosate was developed by Monsanto and is the active ingredient in Roundup; glufosinate was developed by Bayer and is the active ingredient in Liberty. Since the launch of genetically modified crops in the 1990s, Monsanto's Roundup has dominated the market. As some weeds have developed resistance to glyphosate, however, farmers are increasingly turning to Liberty. And while glufosinate and glyphosate are now off patent, competition from generic suppliers has not prevented Bayer and Monsanto from maintaining branded price premiums. In 2017, Bayer had a 7% share of the market for foundational herbicides in the United States, and Monsanto had a 53% share. Thus, this market is already highly concentrated and the merger would result in a post-transaction HHI of approximately 3,700, with an increase of over 650.

36. Going forward, competition between Bayer and Monsanto to develop next-generation weed-management systems is likely to increase. According to a Bayer strategy document, the company's number one ''Must Win Battle'' is to ''[e]stablish LibertyLink as a foundation trait for broadacre [row] crops and position Liberty herbicide as the superior weed management tool.'' Bayer is also developing new non-selective herbicides for soybeans and corn called N,O-Chelators (NOCs), along with traits conferring tolerance to NOCs. If successful, NOCs would form the basis of a new foundational herbicide system that would rival Monsanto's Roundup Ready-based systems.

37. Likewise, Monsanto is actively pursuing innovations in foundational herbicides. For example, Monsanto is developing an improved formulation of Roundup that is expected for release in 2019. Bayer's and Monsanto's incentives to independently pursue these future products in close competition with each other would disappear post-merger.

C. Seed Treatments

38. In addition to relying on genetically modified seeds and herbicides, farmers also protect their crops using seed treatments, which are coatings applied to seeds before they are planted. Seed treatments are a critical tool for modern farmers, and today at least one seed treatment is applied to the vast majority of genetically modified seeds grown in the United States. Multiple seed treatments can be applied to a seed to protect it from various threats; seed treatments designed for one purpose (such as killing insects) are rarely an effective substitute for seed treatments designed for a different purpose (such as controlling fungal diseases).

39. The merger would likely result in three forms of competitive harm related to seed treatments: (1) the loss of head-to-head competition between Bayer's and Monsanto's nematicidal seed treatments; (2) foreclosure effects resulting from the combination of Monsanto's strong position in corn seeds with Bayer's dominant position in insecticidal seed treatments for corn rootworm; and (3) foreclosure effects resulting from the combination of Monsanto's strong position in soybeans with Bayer's dominant position in fungicidal seed treatment for sudden death syndrome.

(1) Nematicidal seed treatments for corn, cotton, and soybeans

40. The merger would eliminate head-to-head competition for nematicidal seed treatments used on corn, cotton, and soybeans. Nematicidal seed treatments protect crops from parasitic roundworms known as nematodes. For corn, cotton, and soybean farmers, there are no cost-effective alternatives to nematicidal seed treatments. And, in part because seed treatments must be registered on a crop-by-crop basis, the treatments for each crop constitute a separate market.

41. All three nematicidal seed treatment markets are highly concentrated. For years, Bayer has had a monopoly in the market for nematicidal seed treatments for corn, with over a 95% share in 2017. Bayer dominates the market for nematicidal seed treatments for soybeans, with a share over 85%. And, in the market for nematicidal seed treatments for cotton, Bayer and Syngenta currently share a duopoly.

42. Although Monsanto does not currently sell in this market, it is poised to launch its first nematicidal seed treatment, NemaStrike. NemaStrike is expected to challenge Bayer's market position in nematicidal seed treatments in all three crops—corn, cotton, and soybeans. Both Bayer and Monsanto project that NemaStrike will capture significant market share from Bayer. By acquiring Monsanto, Bayer would thus eliminate the most significant competitive threat to its dominant position in these markets, to the detriment of farmers who rely on these important products to protect their crops.

(2) Vertical foreclosure—insecticidal seed treatments for corn rootworm and genetically modified corn seeds

43. The merger would also likely harm competition in the market for genetically modified corn by combining Monsanto's strong position in genetically modified corn seeds with Bayer's dominant position in insecticidal seed treatments for corn rootworm.

44. Corn is the largest crop grown in the United States, accounting for over $8 billion in seed sales annually. The vast majority (92%) of U.S. corn seeds are genetically modified. Monsanto is the leading supplier of those seeds, effectively controlling 50% of the market between sales of its own branded seeds and sales through its licensees. Monsanto's only significant rival for corn seed is DowDuPont (with a 34%

share); a few smaller companies also have a small share.

45. Although Bayer does not sell corn seeds, it does sell a critical seed treatment called Poncho. When Poncho is applied at a high rate (with a greater amount of the seed treatment coating per seed), it protects corn seeds from corn rootworm—a pest nicknamed ''the billion dollar bug'' for the amount of loss it costs farmers each year. Poncho is the only significant seed treatment that effectively combats corn rootworm. Thus, most of Monsanto's corn seed rivals depend on Poncho and are expected to become more dependent as the corn rootworm problem grows.

46. By placing Bayer's Poncho and Monsanto's leading GM corn seed under the control of one company, the transaction would give the merged company the incentive and ability to foreclose its corn seed rivals who lack their own seed treatment product and rely on an independent Bayer for their seed treatment supply. Specifically, the merged company would likely hinder its corn seed rivals by forcing them to pay more for Poncho or by denying them access to it entirely. This loss of competition would ultimately hit the pocketbooks of American farmers. By making it harder for Monsanto's corn rivals to compete, farmers would pay higher prices and have fewer effective choices for genetically modified corn seeds throughout the country.

(3) Vertical foreclosure—fungicidal seed treatments for sudden death syndrome and genetically modified soybeans

47. Similarly, the merger would harm competition by combining Monsanto's leading position in genetically modified soybeans with Bayer's dominant position in fungicidal seed treatments.

48. As discussed above, Monsanto leads the market for genetically modified soybeans. It is followed by DowDuPont, with Bayer emerging as a threat and investing heavily to gain share. Smaller players, such as Beck's, also serve the market.

49. Bayer also sells ILeVO, the only seed treatment that effectively protects soybeans from a fungal disease called sudden death syndrome (SDS). According to Bayer, SDS costs farmers an average of over 44 million bushels in lost yield per year, and losses from SDS damage are expected to increase, making Bayer's seed treatment a critical tool for farmers in areas where SDS is a particular risk. Bayer sells ILeVO to Monsanto's soybean rivals, including DowDuPont and Beck's. Since the launch of ILeVO in 2015, Bayer's sales of ILeVO have doubled annually and are expected to continue to grow steadily over the next decade.

50. If allowed to proceed, the merger would combine Monsanto's leading genetically modified soybeans with a key input used on those seeds (ILeVO). As a result, the merged company would likely hinder its soybean rivals by forcing them to pay more for ILeVO or by denying them access to it entirely. This loss of competition would likewise make it harder for Monsanto's rivals to compete, and it would result in higher prices and fewer choices for genetically modified soybeans.

D. Vegetable Seeds

51. Finally, the proposed acquisition would eliminate vital competition between Bayer and Monsanto for the sale of vegetable seeds. In the past 25 years, global vegetable production has doubled as breeders have developed new varieties of vegetables with better disease resistance and higher yields. Unlike with row crops, however, these improvements are due entirely to traditional plant breeding rather than genetic modification. Bayer and Monsanto are leaders in these efforts. Today, Monsanto is the largest vegetable seed company in the world and Bayer is fourth largest. If the merger is allowed to proceed, the combined company would dominate the industry, with global sales rivaling the combined sales of the second- and third-largest vegetable producers (Syngenta and Limagrain, respectively). In the United States, the merger would harm competition for five distinct vegetable species: carrots, cucumbers, onions, tomatoes, and watermelons.

(1) Carrot seeds

52. In the United States, Bayer and Monsanto are the dominant producers of carrot seeds with a combined market share of approximately 94%. The post-transaction HHI would be approximately 8,800, with an increase of approximately 4,000 resulting from the transaction.

53. While competition would be harmed in the market for carrot seeds as a whole, the effects of the acquisition would be particularly acute in the ''cut-and-peel'' carrot segment, which consists of certain carrot varieties that are processed and sold as ready-to-eat baby carrots. Bayer and Monsanto are particularly close competitors in this segment, which constitutes approximately 80% of all carrots consumed in the United States.

(2) Cucumber seeds

54. The market for cucumber seeds is also highly concentrated, with Bayer and Monsanto dominating the market with 34% and 56% market shares, respectively. The post-acquisition HHI would be approximately 7,900, with an increase of approximately 3,700.

55. The effects of the acquisition would be particularly significant in the pickling cucumber seed segment, which makes up a large majority of cucumber acres in the United States. Bayer and Monsanto are two of only three suppliers of pickling cucumber seeds in the United States, with Monsanto as the dominant competitor, followed by Bayer and a company called Rijk Zwaan, based in the Netherlands. As in other markets, Bayer has competed against Monsanto in this segment through innovation, developing seedless varieties of pickling cucumbers to compete with Monsanto's seeded varieties.

(3) Onion seeds

56. Bayer and Monsanto are the two largest onion seed producers in the United States and globally, with substantial sales across a wide variety of onion segments. The U.S. market for onion seeds is already highly concentrated—besides Bayer and Monsanto, the only other producers are Bejo Zaden B.V., based in the Netherlands, and American Takii, Inc., based in California. The merger would give the combined company a share of approximately 71%. The post-transaction HHI would be approximately 5,000, with an increase of approximately 2,500.

(4) Tomato seeds

57. Bayer and Monsanto are two of the largest producers of tomato seeds in the United States, with market shares of 21% and 34%, respectively. The market for tomato seeds is moderately concentrated, and the merger would result in a highly concentrated market. The post-transaction HHI would be approximately 3,000, with an increase of approximately 1,400.

(5) Watermelon seeds

58. Lastly, the watermelon seed market is already highly concentrated, with Bayer and Syngenta, followed by Monsanto, as the largest suppliers in the United States. Bayer has a 37% market share in watermelon seeds, and Monsanto has a 6% share. As a result, the post-acquisition HHI would be approximately 3,300, with an increase of approximately 400. Monsanto's market share in watermelon seeds understates its competitive significance; its recent introduction of competitive seedless watermelon varieties, which are in high demand and already offered

by Monsanto's competitors, would significantly improve its position going forward.

V. ANTICOMPETITIVE EFFECTS

59. The proposed acquisition would substantially lessen competition and harm consumers in each of the relevant markets, either by eliminating head-to-head competition between Bayer and Monsanto or, in the case of certain seed treatments, raising the price of a key input. In each of these markets, the merger would likely result in higher prices, lower quality, and reduced choice. The price effects in these markets would likely result in hundreds of millions of dollars per year in harm, raising costs to farmers and consumers throughout the United States.

60. But the harm does not stop there. The merger would also have a significant impact on innovation. Today, four companies dominate the industry's research and development efforts for seeds and traits. Bayer and Monsanto are the industry leaders, with Bayer emerging as a threat to Monsanto's dominance. In 2016, for example, Bayer spent more on seeds-related research and development as a percentage of sales than any of the other Big Four. As leading innovators, Bayer and Monsanto push each other to improve their current products and technologies, monitor each other's research efforts, and compete to develop new blockbuster products.

61. Without the merger, this competition would intensify as both companies pursue what the industry refers to as integrated solutions—combinations of seeds, traits, and crop protection products, supported by digital-farming technologies and other services. Although integrated solutions are still evolving, it is widely believed that only the Big Four companies—each with its own unique strengths—will be able to offer fully integrated solutions to farmers. With this merger, that competition would be lost.

VI. ABSENCE OF COUNTERVAILING FACTORS

62. Entry would not prevent the merger's likely anticompetitive effects. It takes many years and hundreds of millions of dollars to discover new crop protection chemicals and to develop and commercialize new traits. Once a new trait has been discovered, companies cannot successfully incorporate that trait and sell seeds without access to the extensive libraries of elite seed varieties that are already owned by Bayer, Monsanto, and a small number of other companies. As Bayer's and Monsanto's executives have recognized, barriers to entry in the relevant markets are extraordinarily high.

63. In addition to the difficulty of entry, the proposed acquisition is unlikely to generate verifiable, merger-specific efficiencies that would offset the proposed acquisition's likely anticompetitive effects in the relevant markets.

VII. VIOLATIONS ALLEGED

64. Bayer's proposed acquisition of Monsanto is likely to substantially lessen competition in the relevant markets in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

65. Unless enjoined, the proposed acquisition would likely have the following anticompetitive effects in the relevant markets:

(a) eliminate present and future competition between Bayer and Monsanto;

(b) lessen innovation;

(c) raise prices for farmers and other purchasers; and

(d) reduce quality, service, and choice for farmers and other purchasers.

VIII. REQUEST FOR RELIEF

66. The United States requests that this Court do the following:

(a) adjudge Bayer's proposed acquisition of Monsanto to violate Section 7 of the Clayton Act, 15 U.S.C. § 18;

(b) permanently enjoin Bayer and Monsanto from consummating their proposed acquisition or from entering into or carrying out any other agreement, understanding, or plan by which control of the assets or businesses of Bayer and Monsanto would be combined;

(c) award the United States its costs of this action; and

(d) award the United States other relief that the Court deems just and proper.

Dated: _____

Respectfully submitted,

FOR PLAINTIFF UNITED STATES OF AMERICA:

Makan Delrahim,
Assistant Attorney General for Antitrust.

Bernard A. Nigro, Jr. (D.C. Bar #412357),
Deputy Assistant Attorney General.

Donald G. Kempf, Jr.,
Deputy Assistant Attorney General.

Patricia A. Brink,
Director of Civil Enforcement.

Kathleen S. O'Neill,
Chief, Transportation, Energy & Agriculture Section.

Caroline E. Laise,
Assistant Chief, Transportation, Energy & Agriculture Section.

Scott I. Fitzgerald,
Benjamin H. Able,
Don Amlin (D.C. Bar #978349),
Meagan K. Bellshaw,
Cory Brader Leuchten,
Michele B. Cano,
Barbara W. Cash,
Katherine A. Celeste,
Aaron Comenetz (D.C. Bar #479572),
Erin L. Craig,
Emma Dick,
J. Richard Doidge,
Julie Elmer (D.C. Bar #1520972),
Jeremy Evans (D.C. Bar #478097),
Andrew J. Ewalt (D.C. Bar #493433),
Tracy Fisher,
Rachel A. Flipse,
Leah Graham (D.C. Bar #989727),
Brian Hanna,
John A. Holler,
Rachelle R. Ketchum,
Amanda Klovers,
Patrick Kuhlmann,
Robert A. Lepore,
Michelle Livingston (D.C. Bar #461268),
Njeri Mugure,
Michael Nash,
John R. O'Gorman,
Scott Reiter,
James A. Ryan,
Julia A. Schiller (D.C. Bar #986369),
Adam T. Severt,
Patricia L. Sindel (D.C. Bar #997505),
Chinita M. Sinkler,
Mark Tobey,
Scott A. Westrich,
Christopher M. Wilson,
Catharine Wright.

Attorneys for the United States.

U.S. Department of Justice Antitrust Division 450 5th Street, NW, Suite 8000 Washington, DC 20530 Tel.: (202) 353–3863 Fax: (202) 616–2441 E-mail: *scott.fitzgerald@usdoj.gov.*

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

United States of America, Plaintiff, v. *Bayer AG, Monsanto Company*, and *BASF SE, Defendants.*

Civil Action No.: 1:18–cv–1241
Judge James E. Boasberg

PROPOSED FINAL JUDGMENT

WHEREAS, Plaintiff United States of America filed its Complaint against Bayer AG (''Bayer'') and Monsanto Company (''Monsanto'') on May 29, 2018;

AND WHEREAS, pursuant to a Stipulation and Order among Bayer, Monsanto, and BASF SE (''BASF'') (collectively, ''Defendants'') and Plaintiff, the Court has joined BASF as a defendant to this action for the purposes of settlement and for the entry of this Final Judgment;

AND WHEREAS, Plaintiff and Defendants, by their respective

attorneys, have consented to the entry of this Final Judgment without trial or adjudication of any issue of fact or law, and without this Final Judgment constituting any evidence against or admission by any party regarding any issue of fact or law;

AND WHEREAS, Defendants agree to be bound by the provisions of this Final Judgment pending its approval by this Court;

AND WHEREAS, the essence of this Final Judgment is the prompt and certain divestiture of certain businesses, rights, and assets by Bayer and Monsanto to assure that competition is not substantially lessened;

AND WHEREAS, Plaintiff requires Bayer and Monsanto to make certain divestitures to BASF for the purpose of remedying the loss of competition alleged in the Complaint;

AND WHEREAS, Bayer and Monsanto have represented to Plaintiff that all of the divestitures required below can and will be made as required by this Final Judgment, BASF has represented to Plaintiff that it can and will acquire the Divestiture Assets pursuant to its obligations under this Final Judgment, and Defendants have represented to Plaintiff that they will later raise no claim of hardship or difficulty as grounds for failing to comply with their obligations under this Final Judgment or for asking this Court to modify any of the provisions contained below;

NOW THEREFORE, before any testimony is taken, without trial or adjudication of any issue of fact or law, and upon consent of the parties, it is ORDERED, ADJUDGED, AND DECREED:

I. *JURISDICTION*

This Court has jurisdiction over the subject matter of and each of the parties hereto with respect to this action. The Complaint states a claim upon which relief may be granted against Bayer and Monsanto under Section 7 of the Clayton Act, as amended (15 U.S.C. § 18). Pursuant to the Stipulation and Order filed simultaneously with this Final Judgment joining BASF as a defendant to this action, BASF has consented to this Court's exercise of specific personal jurisdiction over BASF in this matter solely for the purposes of settlement and for the entry and enforcement of the Final Judgment.

II. *DEFINITIONS*

As used in this Final Judgment:

A. ''*Bayer*'' means Defendant Bayer AG, a German corporation with its headquarters in Leverkusen, Germany, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships and joint ventures, and their directors, officers, managers, agents, and employees.

B. ''*Monsanto*'' means Defendant Monsanto Company, a Delaware corporation with its headquarters in St. Louis, Missouri, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships and joint ventures, and their directors, officers, managers, agents, and employees.

C. ''*BASF*'' means Defendant BASF SE, a Societas Europaea with its headquarters in Ludwigshafen, Germany, its successors and assigns, and its subsidiaries, divisions, groups, affiliates, partnerships and joint ventures, and their directors, officers, managers, agents, and employees.

D. ''*'839 Business*'' means Bayer's global business of researching, developing, and manufacturing the BCS–CT12839 pipeline product.

E. ''*Balance Herbicide Business*'' means Bayer's global business of researching, developing, manufacturing, and selling isoxaflutole-based herbicides for use on crops that are isoxaflutole-tolerant as a result of genetic modification.

F. ''*Balance Herbicide Divestiture Assets*'' means the following assets related to the Balance Herbicide Business:

(1) all tangible assets used primarily by or critical to the operation of the Balance Herbicide Business, including, but not limited to, all transferable licenses, permits, product registrations, regulatory submissions, and authorizations issued by or submitted to any governmental organization; all contracts, agreements, leases, commitments, certifications, and understandings, including supply agreements; and all customer lists, accounts, credit records, and transferable customer contracts;

(2) all patents used by the Balance Herbicide Business;

(3) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license to Bayer's BALANCE trademark for marketing and selling isoxaflutole-based herbicides for use on crops that are isoxaflutole-tolerant as a result of genetic modification;

(4) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license (sub-licensable to any tollers designated by BASF) to any intellectual property, registration data, technology, know-how, or other rights used in the manufacture or formulation of isoxaflutole-based herbicides for use on crops that are isoxaflutole-tolerant as a result of genetic modification; and

(5) all other intangible assets owned, licensed, controlled, or used primarily by or critical to the operation of the Balance Herbicide Business, including, but not limited to, all data concerning historical and current research and development efforts, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments.

G. ''*Broad Acre Seeds and Traits Business*'' means Bayer's global business of researching, developing, manufacturing, and selling broad acre seeds and traits, including, but not limited to, the global cotton seed business; the global canola seed business; the global soybean seed business; the global LibertyLink trait business for all crops except rice; the global research and development programs for wheat and ''canola quality'' *Brassica juncea;* and the global trait research and development activities. The Broad Acre Seeds and Traits Business excludes those assets that relate solely to the following: hybrid rice sold in Asia, hybrid cotton sold in India, traditional *juncea* (mustard) and millet sold in India, cotton sold in South Africa, the research and development program for sugarcane in Brazil, the research and development program for sugarbeets in Europe, and the LibertyLink event in rice.

H. ''*Broad Acre Seeds and Traits Divestiture Assets*'' means the following assets related to the Broad Acre Seeds and Traits Business:

(1) all tangible assets that comprise the Broad Acre Seeds and Traits Business, including, but not limited to, research and development activities; all manufacturing plants and equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all transferable licenses, permits, product registrations and regulatory submissions (including supporting data), certifications, and authorizations issued by or submitted to any governmental organization; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, accounts, credit records, and transferable customer contracts; all other business and administrative records; all seed production facilities; all breeding stations; all research and development facilities; all germplasm; and all breeding data, including, but not limited to, phenotype, genotype, molecular markers, and performance data;

(2) all intangible assets owned, licensed, controlled, or used by the Broad Acre Seeds and Traits Business, including, but not limited to, all patents,

plant variety certificates, licenses and sublicenses, intellectual property, copyrights, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, manuals and technical information provided by Bayer to its own employees, customers, suppliers, agents, or licensees; and research data concerning historical and current research and development efforts, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments; and

(3) the copy of Bayer's microbial strain collection (''MSC'') stored in Morrisville, North Carolina, including, but not limited to, all biological materials comprising the MSC and all documents, data, information, reference materials, and trade secrets related to the MSC, and (a) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license to use the MSC for trait research in any crop and (b) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license to use the MSC for any other agricultural use.

Notwithstanding Paragraphs II(H)(1) through II(H)(3) above, the Broad Acre Seeds and Traits Divestiture Assets do not include the facilities identified in Appendix A, Paragraphs 1 and 2, or trademarks, trade names, service marks, or service names containing the name ''Bayer.''

I. ''*Clothianidin Seed Treatment Business*'' means Bayer's global business of researching, developing, manufacturing, and selling seed treatments containing clothianidin, *Bacillus firmus* strain I–1582, or *Bacillus thuringiensis* strain EX 297512. The Clothianidin Seed Treatment Business excludes Bayer's business of manufacturing and selling seed treatment mixture products containing clothianidin for canola/oilseed rape, potatoes, sugarbeets, cereals, or vegetables that have been commercialized by Bayer as of the date of filing of the Complaint in this matter (except Poncho/VOTiVO, Poncho Plus, and Poncho Super). For the avoidance of doubt, these exclusions do not prevent BASF from researching, developing, manufacturing, and selling seed treatments containing clothianidin for canola/oilseed rape, potatoes, sugarbeets, cereals, or vegetables.

J. ''*Collaboration*'' means an agreement among non-affiliated firms involving some sharing of resources, management, or risk, including, but not limited to, joint ventures or research alliances. For the avoidance of doubt, Collaboration for the purpose of this Final Judgment does not include (1) stand-alone intellectual property licenses, including patent, trademark, software, know-how, variety, germplasm, and registration data license agreements; (2) stand-alone crop protection supply or tolling agreements; (3) cooperation agreements related to advocacy and public policy issues; (4) agreements related to participation in industry groups and organizations; and (5) material transfer agreements.

K. ''*Digital Agriculture Business*'' means Bayer's global business of researching, developing, manufacturing, and selling digital agriculture products.

L. ''*Digital Agriculture Divestiture Assets*'' means the following assets related to the Digital Agriculture Business:

(1) all tangible assets that comprise the Digital Agriculture Business, including, but not limited to, research and development activities; all manufacturing plants and equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, accounts, credit records, and transferable customer contracts; all other business and administrative records; all research and development facilities; and

(2) all intangible assets owned, licensed, controlled, or used by the Digital Agriculture Business, including, but not limited to, all patents, licenses and sublicenses, intellectual property, copyrights, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, manuals and technical information provided by Bayer to its own employees, customers, suppliers, agents, or licensees; and research data concerning historical and current research and development efforts related to the Digital Agriculture Business, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments.

Notwithstanding Paragraphs II(L)(1) and II(L)(2) above, the Digital Agriculture Divestiture Assets do not include trademarks, trade names, service marks, or service names containing the name ''Bayer.''

M. ''*Divestiture Assets*'' means:

(1) the Balance Herbicide Divestiture Assets;

(2) the Broad Acre Seeds and Traits Divestiture Assets;

(3) the Digital Agriculture Divestiture Assets;

(4) the Glufosinate Ammonium Divestiture Assets;

(5) the Midwest Soybean Germplasm Divestiture Assets;

(6) the Pipeline Herbicide Divestiture Assets;

(7) the Seed Treatment Divestiture Assets; and

(8) the Vegetable Seed Divestiture Assets.

N. ''*Divestiture Businesses*'' means the Balance Herbicide Business, the Broad Acre Seeds and Traits Business, the Digital Agriculture Business, the Glufosinate Ammonium Business, the Pipeline Herbicide Business, the Seed Treatment Business, and the Vegetable Seed Business.

O. ''*Divestiture Closing Date*'' means (1) with respect to assets, employees, and agreements related to all Divestiture Assets except the Vegetable Seed Divestiture Assets, the date on which Bayer divests those Divestiture Assets to BASF, and (2) with respect to assets, employees, and agreements related to the Vegetable Seed Divestiture Assets, the date on which Bayer divests the Vegetable Seed Divestiture Assets to BASF.

P. ''*Fluopyram Seed Treatment Business*'' means Bayer's global business of researching, developing, manufacturing, and selling seed treatments containing fluopyram. The Fluopyram Seed Treatment Business excludes Bayer's business of researching, developing, manufacturing, and selling cereals seed treatments containing fluopyram, claiming only fungicidal properties, and claiming no nematode control effect. For the avoidance of doubt, this exclusion does not prevent BASF from researching, developing, manufacturing, and selling seed treatments for cereals containing fluopyram.

Q. ''*Glufosinate Ammonium Business*'' means Bayer's global business of researching, developing, manufacturing, and selling glufosinate ammonium herbicide products.

R. ''*Glufosinate Ammonium Divestiture Assets*'' means the following assets related to the Glufosinate Ammonium Business:

(1) Bayer's glufosinate ammonium manufacturing facilities located in Hurth/Knapsack, Germany; Muskegon, Michigan; Mobile, Alabama; and Frankfurt, Germany; Bayer's glufosinate formulation facilities located in Regina, Canada and Muskegon, Michigan; and these facilities' associated manufacturing equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property;

(2) all other tangible assets used primarily by or critical to the operation of the Glufosinate Ammonium Business, including all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all transferable licenses, permits, and authorizations issued by or submitted to any governmental organization; all customer lists, accounts, credit records, and transferable customer contracts; and all other business and administrative records;

(3) all patents used in the Glufosinate Ammonium Business, except for (a) patents related to the mixture or combined or sequential use of glufosinate ammonium with other active ingredients (''Glufosinate Mixture and Use Patents'') and (b) patents related to the use of glufosinate ammonium, alone or in mixtures, on plants containing genetically modified events developed or to be developed by Bayer or Monsanto (''Glufosinate Over-The-Top Patents'');

(4) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license for all Glufosinate Mixture and Use Patents owned, controlled, licensed, or used by Bayer or Monsanto with one or more claims covering a BASF proprietary active ingredient;

(5) a worldwide, non-exclusive, irrevocable, perpetual covenant not to assert against BASF or its direct or indirect customers all other Glufosinate Mixture and Use Patents owned, controlled, licensed, or used by Bayer or Monsanto with one or more claims covering any other active ingredient, except for any active ingredient itself covered by a Bayer or Monsanto patent, during the life of that patent;

(6) a worldwide, non-exclusive, irrevocable, perpetual covenant not to assert against BASF or its direct or indirect customers all current or future Glufosinate Over-The-Top Patents owned, controlled, licensed, or used by Bayer or Monsanto;

(7) all other intangible assets owned, licensed, controlled, or used primarily by or critical to the operation of the Glufosinate Ammonium Business, including, but not limited to, all licenses and sublicenses, intellectual property, copyrights, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, manuals and technical information provided by Bayer to its own employees, customers, suppliers, agents, or licensees; and research data concerning historical and current research and development efforts, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments; and

(8) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license to all other intellectual property (owned by Bayer or that Bayer has the right to license) that is used by the Glufosinate Ammonium Business and not addressed earlier in Paragraph II.R, including, but not limited to, all copyrights, trademarks, trade names, service marks, service names, and trade secrets. Such license shall grant BASF the right to make, have made, use, sell or offer for sale, copy, create derivative works of, modify, improve, display, perform, and enhance the licensed intangible assets. Any improvements or modifications to these intangible assets developed by BASF shall be owned solely by BASF.

Notwithstanding Paragraphs II(R)(1) through II(R)(8) above, the Glufosinate Ammonium Divestiture Assets do not include the thirty (30) general office facilities identified in Appendix A, Paragraph 1; the fourteen (14) formulation and filling sites identified in Appendix A, Paragraph 3; or trademarks, trade names, service marks, or service names containing the name ''Bayer.''

S. ''*Midwest Soybean Germplasm Divestiture Assets*'' means the following Monsanto assets:

(1) the four hundred and nineteen (419) soybean populations identified in Appendix B;

(2) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license for breeding purposes (subject to the limitations in Paragraph II(S)(4)) to twenty (20) soybean varieties developed by Monsanto that BASF subsequently will choose pursuant to the following process: Bayer will expeditiously provide BASF with access (including to all supporting data) to all of the Monsanto Corn States lines (for which Monsanto has the ability to offer breeding rights) developed by Monsanto for each of the years 2019 and 2020. BASF may choose two varieties for each of maturity zones zero through four, resulting in a license for twenty (20) lines over the two (2) years;

(3) all data (including, but not limited to, phenotype, genotype, molecular markers, and performance data) related to the transferred populations or licensed breeding varieties in Paragraph II(S)(1) above for the purpose of developing commercial soybean varieties; and a copy of all data (including, but not limited to, phenotype, genotype, molecular markers, and performance data) related to the transferred populations or licensed breeding varieties in Paragraph II(S)(2) above for the purpose of developing commercial soybean varieties; and

(4) all rights to develop commercial soybean varieties using the transferred populations or licensed breeding varieties in Paragraphs II(S)(1) and II(S)(2) above, which rights shall not be limited other than requiring compliance with trait license agreements for any Monsanto traits remaining in any developed line.

T. ''*Pipeline Herbicide Business*'' means Bayer's global business of researching, developing, and manufacturing ketoenole and N,O-Chelator (''NOC'') herbicides for non-selective uses.

U. ''*Pipeline Herbicide Divestiture Assets*'' means the following assets related to the Pipeline Herbicide Business:

(1) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license in the field of non-selective uses for all Bayer intellectual property rights and know-how related to Bayer's ketoenole and to Bayer's NOC herbicide candidates;

(2) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license (sub-licensable to any tollers designated by BASF) to any intellectual property, registration data, technology, know-how, or other rights used in the manufacture or formulation of ketoenole and of NOC herbicides for non-selective uses;

(3) all data, documents, and know-how from in vitro assays related to the use of Bayer's ketoenole and Bayer's NOC herbicide candidates with Bayer's relevant herbicide-tolerance traits;

(4) all field trials conducted on Bayer's ketoenole and Bayer's NOC herbicide candidates for non-selective uses;

(5) samples of all ketoenole and all NOC herbicide molecules; and

(6) all data and information on the molecular structure and other characteristics of Bayer's ketoenole and Bayer's NOC herbicide candidates.

V. ''*Relevant Personnel*'' means all Bayer employees who have supported or whose job related to the Divestiture Businesses at any time between January 1, 2015 and the Divestiture Closing Date.

W. ''*Seed Treatment Business*'' means the Clothianidin Seed Treatment Business, the Fluopyram Seed Treatment Business, and the '839 Business.

X. ''*Seed Treatment Divestiture Assets*'' means the following assets related to the Seed Treatment Business:

(1) Bayer's Seed Growth Center located in Research Triangle Park, North Carolina, including all equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property at this facility;

(2) all other tangible assets used primarily by or critical to the operation of the Seed Treatment Business, including, but not limited to, all transferable licenses, permits, certifications, product registrations, regulatory submissions, and authorizations issued by or submitted to any governmental organization; all contracts, teaming arrangements, agreements, commitments, certifications, and understandings, including supply agreements; all customer lists, accounts, credit records, and transferable customer contracts; all sales and marketing assets, including, but not limited to, distribution plans and any market research conducted; all other business and administrative records; samples of all molecules; all information on the molecular structure and other characteristics of the products; and all internal and available external studies;

(3) all patents used in Bayer's current and pipeline Poncho, Poncho Plus, Poncho Super, Poncho/VOTiVO, Poncho/VOTiVO 2.0, VOTiVO, VOTiVO 2.0, and TWO.0 seed treatments;

(4) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license to any other patent with one or more claims covering the combination of clothianidin, *Bacillus firmus* strain I–1582, or *Bacillus thuringiensis* strain EX 297512 with another active ingredient, for BASF to combine clothianidin, *Bacillus firmus* strain I–1582, or *Bacillus thuringiensis* strain EX 297512 with any such other active ingredient(s) for seed treatment uses; provided, however, that this license does not include any right to make, sell, use, or otherwise commercialize any active ingredient itself covered by a Bayer or Monsanto patent, during the life of that patent;

(5) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license for seed treatment uses to all patents used in Bayer's current and pipeline ILeVO and COPeO seed treatments; provided, however, that this license will be non-exclusive for cereals seed treatments containing fluopyram, claiming only fungicidal properties, and claiming no nematode control effect;

(6) a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license to any other patent with one or more claims covering the combination of fluopyram with another active ingredient, for BASF to combine fluopyram with any such other active ingredient(s) for seed treatment uses; provided, however, that (a) this license will be non-exclusive for cereals seed treatments containing fluopyram, claiming only fungicidal properties, and claiming no nematode control effect; and (b) this license does not include any right to make, sell, use, or otherwise commercialize any active ingredient itself covered by a Bayer or Monsanto patent, during the life of that patent;

(7) all patents used exclusively in the '839 Business, and a worldwide, exclusive, royalty-free, paid-up, irrevocable, perpetual license to all other patents with one or more claims used in the '839 Business;

(8) a worldwide, non-exclusive, irrevocable, perpetual covenant not to assert against BASF and its direct or indirect customers all other patents owned, controlled, licensed, or used by Bayer or Monsanto with claims covering the mixture or combined or sequential use of clothianidin, *Bacillus firmus* strain I–1582, *Bacillus thuringiensis* strain EX 297512, fluopyram, or BCS–CT12839 with any active ingredient or combination of active ingredients, except for any active ingredient itself covered by a Bayer or Monsanto patent, during the life of that patent;

(9) a worldwide, non-exclusive, royalty-free, paid-up, irrevocable, perpetual license (sub-licensable to any tollers designated by BASF) to any other intellectual property, registration data, technology, know-how, or other rights used in the manufacture or formulation of any current or pipeline product divested as part of the Seed Treatment Business; and

(10) all other intangible assets owned, licensed, controlled, or used by the Seed Treatment Business, including, but not limited to, all licenses and sublicenses, intellectual property, copyrights, trademarks, trade names, service marks, service names, technical information, know-how, trade secrets, drawings, designs, design protocols, specifications for materials, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, manuals and technical information provided by Bayer to its own employees, customers, suppliers, agents, or licensees, and data concerning historical and current research and development efforts, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments.

Notwithstanding Paragraphs II(X)(1) through II(X)(10) above, the Seed Treatment Divestiture Assets do not include (a) active ingredient production facilities in Dormagen, Germany; Bergkamen, Germany; or Tlaxcala, Mexico; (b) formulation, filling, or packaging sites in Amatitlan, Guatemala; Belford Roxo, Brazil; Frankfurt, Germany; Kansas City, Missouri; Pinkenba, Australia; or Zarate, Argentina; or (c) trademarks, trade names, service marks, or service names containing the name ''Bayer.''

Y. ''*Shared Confidential Information*'' means confidential business information relayed from Bayer to BASF, or vice versa, as a result of any agreements entered into pursuant to Paragraph IV(G) or Paragraph IV(H) of this Final Judgment, including quantities, units, and prices of items ordered or purchased, and any other competitively sensitive information regarding Bayer's or BASF's performance under these agreements.

Z. ''*Vegetable Seed Business*'' means Bayer's global business of researching, developing, manufacturing, and selling vegetable seeds.

AA. ''*Vegetable Seed Divestiture Assets*'' means the following assets related to the Vegetable Seed Business:

(1) all tangible assets that comprise the Vegetable Seed Business including, but not limited to, research and development activities; all manufacturing plants and equipment, tooling and fixed assets, personal property, inventory, office furniture, materials, supplies, and other tangible property; all transferable licenses, permits, product registrations and regulatory submissions (including supporting data), certifications, and authorizations issued by or submitted to

any governmental organization; all contracts, teaming arrangements, agreements, leases, commitments, certifications, and understandings, including supply agreements; all customer lists, accounts, credit records, and transferable customer contracts; all other business and administrative records; seed production facilities; breeding stations; all research and development facilities; all germplasm; and all breeding data, including, but not limited to, phenotype, genotype, molecular markers, and performance data; and

(2) all intangible assets owned, licensed, controlled, or used by the Vegetable Seed Business, including, but not limited to, all patents, plant variety certificates, licenses and sublicenses, intellectual property, copyrights, trademarks, trade names, service marks, service names, technical information, computer software and related documentation, know-how, trade secrets, drawings, blueprints, designs, design protocols, specifications for materials, specifications for parts and devices, safety procedures for the handling of materials and substances, quality assurance and control procedures, design tools and simulation capability, manuals and technical information provided by Bayer to its own employees, customers, suppliers, agents, or licensees; and research data concerning historical and current research and development efforts, including, but not limited to, designs of experiments and the results of successful and unsuccessful designs and experiments.

Notwithstanding Paragraphs II(AA)(1) and II(AA)(2) above, the Vegetable Seed Divestiture Assets do not include the thirty-four (34) office facilities identified in Appendix A, Paragraph 4, or trademarks, trade names, service marks, or service names containing the name ''Bayer.''

BB. ''*Yield and Stress Collaboration*'' means any agreement between Monsanto and BASF existing as of the date of filing of the Complaint in this matter related to a collaboration to develop yield and stress traits for row crops.

III. *APPLICABILITY*

This Final Judgment applies to Defendants and all other persons in active concert or participation with any of them who receive actual notice of this Final Judgment by personal service or otherwise.

IV. *DIVESTITURES*

A. By the later of ninety (90) calendar days after the filing of the Complaint in this matter or ninety (90) calendar days after receiving all international antitrust approvals required for the transfer of the Divestiture Assets, Bayer and Monsanto are ordered and directed to divest the Divestiture Assets to BASF in a manner consistent with this Final Judgment. The United States, in its sole discretion, may agree to one or more extensions of this period not to exceed sixty (60) calendar days in total and shall notify this Court in such circumstances. Defendants agree to use their best efforts to divest the Divestiture Assets as expeditiously as possible.

B. Bayer shall permit BASF to have reasonable access to personnel and to make inspections of the facilities to be acquired by BASF; access to any and all environmental, zoning, and other permit documents and information; and access to any and all financial, operational, or other documents and information customarily provided as part of a due diligence process.

C. Bayer and Monsanto shall not take any action that will impede in any way the permitting, operation, or divestiture of the Divestiture Assets.

D. Unless the United States otherwise consents in writing, the divestitures pursuant to Section IV of this Final Judgment shall include the entire Divestiture Assets and shall be accomplished in such a way as to satisfy the United States, in its sole discretion, that the Divestiture Assets can and will be used by BASF as part of the viable, ongoing operation of the Divestiture Businesses. The divestitures shall be accomplished so as to satisfy the United States, in its sole discretion, that none of the terms of any agreement between BASF and Bayer and Monsanto give Bayer and Monsanto the ability unreasonably to raise BASF's costs, to lower BASF's efficiency, or otherwise to interfere in the ability of BASF to compete effectively.

E. **Employees**

(1) Within ten (10) business days following the filing of the Complaint in this matter, Bayer shall provide to BASF, the United States, and the Monitoring Trustee, organization charts covering every person providing any support for the Divestiture Businesses for each year since January 1, 2015. Within ten (10) business days of receiving a request from BASF, Bayer shall provide to BASF, the United States, and the Monitoring Trustee, additional information related to identified Relevant Personnel, including name, job title, reporting relationships, Hay points, past experience, responsibilities from January 1, 2015 through the Divestiture Closing Date, training and educational history, relevant certifications, job performance evaluations, and current salary and benefits information to enable BASF to make offers of employment. If Bayer is barred by any applicable laws from providing any of this information to BASF, within ten (10) business days of receiving BASF's request, Bayer shall provide the requested information to the greatest extent possible under applicable laws and also provide a written explanation of its inability to comply fully with BASF's request for information regarding Relevant Personnel.

(2) Upon request, Bayer shall make Relevant Personnel available for interviews with BASF during normal business hours at a mutually agreeable location. Bayer will not interfere with any negotiations by BASF to employ any Relevant Personnel. Interference includes but is not limited to offering to increase the salary or benefits of Relevant Personnel other than as part of a company-wide increase in salary or benefits granted in the ordinary course of business.

(3) For any Relevant Personnel who elect employment with BASF, Bayer shall waive all non-compete and non-disclosure agreements (except as noted in Paragraph IV(E)(5)), vest all unvested pension and other equity rights, and provide all benefits which Relevant Personnel would be provided if transferred to a buyer of an ongoing business.

(4) For a period of two (2) years from the date of filing of the Complaint in this matter, Bayer may not solicit to hire, or hire, any such person who was hired by BASF, unless (a) such individual is terminated or laid off by BASF or (b) BASF agrees in writing that Bayer may solicit or hire that individual.

(5) Nothing in Paragraph IV(E) shall prohibit Bayer from maintaining any reasonable restrictions on the disclosure by any employee who accepts an offer of employment with BASF of Bayer's proprietary non-public information that is (a) not otherwise required to be disclosed by this Final Judgment, (b) related solely to Bayer's businesses and clients, and (c) unrelated to the Divestiture Assets.

(6) BASF's right to hire Relevant Personnel pursuant to Section IV(E) and Bayer's obligations under Paragraph IV(E)(1), Paragraph IV(E)(2), and Paragraph IV(E)(3) shall last for a period of one (1) year after the Divestiture Closing Date.

F. **Asset Warranties**

(1) In addition to any other warranties in the divestiture-related agreements entered into by Defendants, Bayer and

Monsanto shall warrant to BASF (a) that each asset will be operational as of the Divestiture Closing Date; (b) that, for each of the Divestiture Assets, there are no material defects in the environmental, zoning, or other permits pertaining to the operation of each asset; (c) that following the sale of each of the Divestiture Assets, Bayer will not undertake, directly or indirectly, any challenges to the environmental, zoning, or other permits related to the operation of each of the Divestiture Assets; and (d) the Divestiture Assets are sufficient in all material respects for BASF, taking into account BASF's assets and business, to maintain the viability and competitiveness of the Divestiture Businesses.

(2) In addition to any other remedial provisions in the divestiture-related agreements entered into by Defendants, for a period of up to one (1) year following the Divestiture Closing Date, if BASF determines that any assets not included in the Divestiture Assets were previously used by the Divestiture Businesses and are reasonably necessary for the continued competitiveness of the Divestiture Businesses, it shall notify the United States, the Monitoring Trustee, and Bayer in writing that it requires such assets. The United States, in its sole discretion, taking into account BASF's assets and business, shall determine whether any of the assets identified should be divested to BASF. If the United States determines that such assets should be divested, Bayer and BASF will negotiate an agreement within thirty (30) calendar days providing for the divestiture of such assets in a period to be determined by the United States in consultation with Bayer and BASF. The terms of any such divestiture agreement shall be commercially reasonable and must be acceptable to the United States, in its sole discretion.

G. **Supply and Tolling Agreements**

(1) *Seed Treatment Supply Agreements for Broad Acre Seeds and Traits Business:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more agreements with BASF for the supply of the Bayer seed treatments (except the seed treatments divested as part of the Clothianidin Seed Treatment Business or Fluopyram Seed Treatment Business) used by Bayer in the Broad Acre Seeds and Traits Business for an initial period of up to two (2) years. Bayer will supply BASF with these seed treatments at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the supply of seed treatments. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional two (2) years. The United States, in its sole discretion, shall determine whether supply pursuant to any such extension must be at variable cost.

(2) *Isoxaflutole Supply Agreement:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more agreements with BASF for the supply of isoxaflutole to be used on crops that are isoxaflutole-tolerant as a result of genetic modification for an initial period of two (2) years. Bayer will supply BASF with formulated isoxaflutole and the isoxaflutole active ingredient at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the supply of herbicides and the active ingredients in herbicides. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional four (4) years. The United States, in its sole discretion, shall determine whether supply pursuant to any such extension must be at variable cost.

(3) *Tolling Agreement for Glufosinate Ammonium:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more tolling agreements with BASF for the formulation, filling, and packaging of glufosinate ammonium products for an initial period of up to two (2) years. Bayer will formulate, fill, and package glufosinate ammonium products for BASF at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the formulation, filling, and packaging of herbicides. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional one (1) year. The United States, in its sole discretion, shall determine whether tolling pursuant to any such extension must be at variable cost.

(4) *Tolling Agreement for Divested Seed Treatment Formulations:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more tolling agreements with BASF for the formulation, filling, and packaging of the seed treatments divested as part of the Clothianidin Seed Treatment Business and the Fluopyram Seed Treatment Business for an initial period of up to two (2) years. Bayer will toll these products for BASF at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the formulation, filling, and packaging of seed treatments. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional two (2) years. The United States, in its sole discretion, shall determine whether tolling pursuant to any such extension must be at variable cost.

(5) *Clothianidin Active Ingredient Tolling Agreement:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more tolling agreements with BASF for the supply of the active ingredients used in the seed treatments divested as part of the Clothianidin Seed Treatment Business for an initial period of up to two (2) years. Bayer will toll these active ingredients for BASF at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the tolling of active ingredients used in seed treatments. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional four (4) years. The United States, in its sole discretion, shall determine whether tolling pursuant to any such extension must be at variable cost.

(6) *Fluopyram Active Ingredient Tolling Agreement:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into a tolling agreement with BASF for the supply of the fluopyram active ingredient for an initial period of up to two (2) years. Bayer will toll this active ingredient for BASF at variable cost, in priority over other purchasers, and in the quantities demanded by BASF under any such agreement until the expiration of that agreement. All other

terms and conditions of any such agreement must be reasonably related to market conditions for the tolling of active ingredients used in seed treatments. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional four (4) years. The United States, in its sole discretion, shall determine whether tolling pursuant to any such extension must be at variable cost.

(7) *Reverse-Tolling Agreement for Bayer Products:* At the option of Bayer, on or before the Divestiture Closing Date, BASF shall enter into a reverse-tolling agreement with Bayer for the formulation, filling, and packaging of the Bayer products manufactured at the Regina, Canada formulation facility that is part of the Glufosinate Ammonium Divestiture Assets for an initial period of up to two (2) years. All terms and conditions of any such agreement must be reasonably related to market conditions for the formulation, filling, and packaging of these crop protection products. Upon Bayer's request, the United States, in its sole discretion, may approve one or more extensions of such agreement for a total of up to an additional six (6) months.

(8) *Other Supply and Tolling Agreements:* At the option of BASF, on or before the Divestiture Closing Date, Bayer and BASF shall enter into any other supply, reverse-supply, tolling, or reverse-tolling agreements reasonably necessary to allow BASF to operate any Divestiture Assets or to facilitate the transfer of Bayer facilities to BASF.

(9) The terms and conditions of all agreements reached between Bayer and BASF under Paragraph IV(G) must be acceptable to the United States, in its sole discretion. Any amendment or modification of such agreements may be entered into only with the approval of the United States, in its sole discretion. Bayer shall perform all duties and provide all services required of Bayer under the agreements reached between Bayer and BASF under Paragraph IV(G).

(10) BASF will use best efforts to develop or procure alternative sources of supply by the end of the initial periods identified in Paragraph IV(G) for supply and tolling agreements and will continue to use best efforts during any extension period.

(11) Bayer will use best efforts to develop or procure alternative sources of supply by the end of the initial periods identified in Paragraph IV(G) for reverse-supply and reverse-tolling agreements and will continue to use best efforts during any extension period.

H. **Transition Services**

(1) *Transition Services Agreements for Information Technology Support:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more transition services agreements to provide information technology services and support for the Divestiture Assets for an initial period of up to one (1) year. Bayer will provide the transition services under any such agreement at no cost to BASF until the expiration of the agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the provision of the relevant services. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of this agreement for a total of up to an additional one (1) year.

(2) *Bayer Warranty of Transition Services Provided by Tata Consultancy Services:* Bayer has contracted with a third-party vendor, Tata Consultancy Services, to create interim, stand-alone information and business support systems for some components of the Divestiture Assets. Bayer shall warrant to BASF that the systems developed by Tata Consultancy Services will be operational on the Divestiture Closing Date and support operations of the relevant components of the Divestiture Assets in a manner that is substantially consistent with prior operations of these businesses. Except for *de minimis* deficiencies, Bayer shall use best efforts to take all necessary actions to correct expeditiously any deficiencies inconsistent with this warranty and shall be solely responsible for all costs incurred in resolving the deficiencies, including by paying Tata Consultancy Services's fees.

(3) *Distribution Agreements for Glufosinate Ammonium and Divested Seed Treatment Products:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into one or more agreements to distribute on BASF's behalf products containing glufosinate ammonium, clothianidin, *Bacillus firmus* strain I–1582, or fluopyram outside the United States. BASF shall terminate any such agreement within one (1) year. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of the period for BASF to terminate any such agreement for a total of up to an additional one (1) year.

(4) *Other Transition Services Agreements:* At the option of BASF, on or before the Divestiture Closing Date, Bayer shall enter into other transition services or reverse transition services agreements to provide any other transition services reasonably necessary to allow BASF to operate any Divestiture Assets or to facilitate the transfer of Bayer facilities to BASF. Unless specifically excepted elsewhere in this Final Judgment, Bayer will provide transition services under any such agreement for an initial period of up to two (2) years and on price terms no worse than at variable cost until the expiration of the agreement. All other terms and conditions of any such agreement must be reasonably related to market conditions for the provision of the relevant services. Upon BASF's request, the United States, in its sole discretion, may approve one or more extensions of any such agreement for a total of up to an additional one (1) year.

(5) The terms and conditions of all agreements reached between Bayer and BASF under Paragraph IV(H) must be acceptable to the United States, in its sole discretion. Any amendments or modifications of the agreements may be entered into only with the approval of the United States, in its sole discretion. Bayer shall perform all duties and provide all services required of Bayer under the agreements reached between Bayer and BASF under Paragraph IV(H).

(6) BASF will use best efforts to develop alternative solutions by the end of the initial periods identified in Paragraph IV(H) for transition services agreements and will continue to use best efforts during any extension period.

(7) Bayer will use best efforts to develop alternative solutions by the end of the initial periods identified in Paragraph IV(H) for reverse-transition services agreements and will continue to use best efforts during any extension period.

I. **Clothianidin Licenses Back:** At the option of Bayer, BASF shall enter into an agreement to provide Bayer the following licenses:

(1) a worldwide, exclusive, royalty-free, paid-up license to the rights transferred to BASF in Paragraph II(X)(3) for (a) all non-seed treatment uses of clothianidin, (b) all uses of active ingredients other than clothianidin, *Bacillus firmus* strain I–1582, or *Bacillus thuringiensis* strain EX 297512, and (c) combinations of active ingredients that do not include clothianidin, *Bacillus firmus* strain I–1582, or *Bacillus thuringiensis* strain EX 297512; and

(2) a worldwide, non-exclusive, royalty-free, paid-up license to the rights transferred to BASF in Paragraphs II(X)(3) and II(X)(4) for the use of clothianidin in any Bayer seed treatment mixture product for canola/oilseed rape, potatoes, sugarbeets, cereals, and vegetables that has been commercialized by Bayer as of the date

of the filing of the Complaint in this matter (except Poncho/VOTiVO, Poncho Plus, and Poncho Super).

J. **Digital Agriculture License Back:** At the option of Bayer, BASF shall enter into an agreement to provide Bayer a non-exclusive, royalty-free, paid-up license to the Digital Agriculture Divestiture Assets for the limited purpose of allowing Bayer to sell outside North America the following digital agriculture products: Expert.com web application; Weedscout mobile application; Xarvio FieldManager web application; Xarvio FieldManager mobile application; and Xarvio Scouting mobile application. This license shall not give Bayer (1) any rights to any improvements made by BASF to the Digital Agriculture Divestiture Assets or (2) any rights to use any trademarks or brand names divested as part of the Digital Agriculture Divestiture Assets, including, but not limited to, Expert.com, Weedscout, or Xarvio.

K. Third-Party Agreements: At BASF's option, on or before the Divestiture Closing Date, Bayer shall assign or otherwise transfer to BASF all transferable or assignable agreements, or any assignable portions thereof, related to the Divestiture Assets, including, but not limited to, all customer contracts, licenses, and collaborations. Bayer shall use best efforts to expeditiously obtain from any third parties any consent necessary to transfer or assign to BASF all agreements related to the Divestiture Assets. To the extent consent cannot be obtained and the agreement is not otherwise assignable, in addition to the existing mitigation rules agreed upon between Bayer and BASF, Bayer shall use best efforts to obtain for BASF, as expeditiously as possible, the full benefit of any such agreement as it relates to the Divestiture Businesses by assisting BASF to secure a new agreement and by taking any other steps necessary to ensure that BASF obtains the full benefit of the agreement as it relates to the Divestiture Businesses. Bayer will not assert, directly or indirectly, any legal claim that would interfere with BASF's ability to obtain the full benefit from any transferred third-party agreement to the same extent enjoyed by Bayer prior to the transfer.

L. **Licenses, Registrations, and Permits**

(1) Where necessary, BASF will apply for licenses, registrations, and permits that support the Divestiture Businesses to replace those held by Bayer as expeditiously as possible and, in any event, no later than six (6) months from the Divestiture Closing Date. The United States, in its sole discretion, may approve one or more extensions of this period, for a total of up to an additional six (6) months, for BASF to satisfy this requirement. BASF will make best efforts to obtain such licenses, registrations, and permits as expeditiously as possible.

(2) Bayer will make best efforts to assist BASF with acquiring new licenses, registrations, and permits to support the Divestiture Businesses and, until BASF has the necessary licenses, registrations, and permits, Bayer will provide BASF with the benefit of Bayer's licenses, registrations, and permits in BASF's operation of the Divestiture Assets.

(3) Bayer will globally maintain all product registrations for isoxaflutole, fluopyram, and any other retained product registrations related to the Divestiture Businesses, and Bayer will make best efforts to obtain regulatory approvals for isoxaflutole formulations used on isoxaflutole-tolerant cotton and soybeans.

M. **Modification of Monsanto-BASF Yield and Stress Collaboration:** The Yield and Stress Collaboration will be modified consistent with the following: (1) Defendants shall not contribute any more genes to the Yield and Stress Collaboration; (2) the Yield and Stress Collaboration will continue as before with respect to genes or events in the three active research and development projects, except that BASF will receive a license with stacking rights to use in its own seeds any Yield and Stress Collaboration trait commercialized by Monsanto, on terms acceptable to the United States, in its sole discretion; (3) both Bayer and BASF shall receive (a) copies of all other genes and related research records in the Yield and Stress Collaboration regardless of crop, and (b) non-exclusive research, development, breeding, and commercialization rights to these genes in any crop with no cost, revenue, or profit sharing; and (4) the terms related to DroughtGard shall be unchanged.

N. **Monsanto Midwest Soybean Germplasm:** At the option of BASF, on or before the Divestiture Closing Date, Bayer and Monsanto shall enter into one or more agreements facilitating the transfer and licensing of the Midwest Soybean Germplasm Divestiture Assets. The terms and conditions of any such agreement reached between Bayer and Monsanto and BASF must be acceptable to the United States, in its sole discretion. Any amendment or modification of any such agreement may be entered into only with the approval of the United States, in its sole discretion. Bayer and Monsanto shall perform all duties and provide all services required of them under any such agreement reached between Bayer and BASF.

V. *FINANCING*

Neither Bayer nor Monsanto shall finance all or any part of any purchase made pursuant to Section IV of this Final Judgment.

VI. *HOLD SEPARATE AND ASSET PRESERVATION*

Until all the divestitures required by this Final Judgment have been fully accomplished, Defendants shall take all steps necessary to comply with the Stipulation and Order entered by this Court. Defendants shall take no action that would jeopardize any divestiture ordered by this Court.

VII. *AFFIDAVITS*

A. Within twenty (20) calendar days of the filing of the Complaint in this matter, and every thirty (30) calendar days thereafter until the divestitures have been accomplished under Section IV, Bayer and Monsanto shall deliver to the United States and the Monitoring Trustee an affidavit, signed by each of Bayer's and Monsanto's Chief Financial Officer and General Counsel, which shall describe the fact and manner of Bayer's and Monsanto's compliance with Section IV. Assuming the information set forth in the affidavit is true and complete, any objection by the United States to information provided by Bayer and Monsanto, including limitation on information, shall be made within fourteen (14) calendar days of receipt of such affidavit.

B. Within twenty (20) calendar days of the filing of the Complaint in this matter, each of the Defendants shall deliver to the United States and the Monitoring Trustee an affidavit that describes in reasonable detail all actions it has taken and all steps it has implemented on an ongoing basis to comply with this Final Judgment and the Stipulation and Order. Each of the Defendants shall deliver to the United States and the Monitoring Trustee an affidavit describing any changes to the efforts and actions outlined in its earlier affidavits filed pursuant to this Final Judgment within fifteen (15) calendar days after the change is implemented.

C. In addition to providing affidavits to the United States and the Monitoring Trustee as required under Paragraph VII(A) and Paragraph VII(B), Defendants shall immediately notify the United States and the Monitoring Trustee verbally and in writing of any potential problems or delays in meeting any of the obligations set forth in this Final Judgment and the Stipulation and Order.

D. Bayer and Monsanto shall keep all records of all efforts made to preserve and divest each of the Divestiture Assets until one year after such divestitures have been completed. BASF shall keep all records of all efforts made to acquire each of the Divestiture Assets until one year after such divestitures have been completed.

VIII. *APPOINTMENT OF MONITORING TRUSTEE*

A. Upon filing of this Final Judgment, the United States may, in its sole discretion, appoint a Monitoring Trustee, subject to approval by this Court.

B. The Monitoring Trustee shall have the power and authority to monitor Defendants' compliance with the terms of this Final Judgment and the Stipulation and Order entered by this Court, and shall have such other powers as this Court deems appropriate. The Monitoring Trustee shall investigate and report on Defendants' compliance with their respective obligations under, and efforts to effectuate the purposes of, this Final Judgment and the Stipulation and Order, including, but not limited to, reviewing (1) the implementation and execution of the compliance plan required by Section IX, and (2) any claimed breach by Bayer of any agreement entered into pursuant to Paragraph IV(G) or Paragraph IV(H). If the Monitoring Trustee determines that any violation of the Final Judgment or the Stipulation and Order or breach of any related agreement has occurred, the Monitoring Trustee shall recommend an appropriate remedy to the United States, which, in its sole discretion, can accept, modify, or reject a recommendation to pursue a remedy.

C. Subject to Paragraph VIII(E), the Monitoring Trustee may hire at Bayer's cost and expense any consultants, accountants, attorneys, or other agents reasonably necessary in the Monitoring Trustee's judgment and who shall be solely accountable to the Monitoring Trustee. Any such consultants, accountants, attorneys, or other agents shall serve on such terms and conditions as the United States approves, in its sole discretion, including confidentiality requirements and conflict of interest certifications.

D. Defendants shall not object to actions taken by the Monitoring Trustee in fulfillment of the Monitoring Trustee's responsibilities under any order of this Court on any ground other than the Monitoring Trustee's malfeasance. Any such objections by Defendants must be conveyed in writing to the United States and the Monitoring Trustee within ten (10) calendar days after the action taken by the Monitoring Trustee giving rise to the Defendants' objection.

E. The Monitoring Trustee shall serve at Bayer's cost and expense pursuant to a written agreement with Bayer and on such terms and conditions as the United States approves, in its sole discretion, including confidentiality requirements and conflict of interest certifications. The compensation of the Monitoring Trustee and any consultants, accountants, attorneys, and other agents retained by the Monitoring Trustee shall be on reasonable and customary terms commensurate with the individuals' experience and responsibilities. If the Monitoring Trustee and Bayer are unable to reach agreement on the Monitoring Trustee's or any agents' or consultants' compensation or other terms and conditions of engagement within fourteen (14) calendar days of appointment of the Monitoring Trustee, the United States may, in its sole discretion, take appropriate action, including making a recommendation to this Court. The Monitoring Trustee shall, within three (3) business days of hiring any consultants, accountants, attorneys, or other agents, provide written notice of such hiring and the rate of compensation to Bayer and the United States.

F. The Monitoring Trustee shall have no responsibility or obligation for the operation of Defendants' businesses.

G. Defendants shall use their best efforts to assist the Monitoring Trustee in monitoring Defendants' compliance with their individual obligations under this Final Judgment and the Stipulation and Order. The Monitoring Trustee and any consultants, accountants, attorneys, and other agents retained by the Monitoring Trustee shall have full and complete access to the personnel, books, records, and facilities related to compliance with this Final Judgment and the Stipulation and Order, subject to reasonable protection for trade secret or other confidential research, development, or commercial information or any applicable privileges. Defendants shall take no action to interfere with or to impede the Monitoring Trustee's accomplishment of its responsibilities.

H. After its appointment, the Monitoring Trustee shall file reports monthly until all the Divestiture Assets have been divested and thereafter as frequently as the United States determines, in its sole discretion, setting forth Defendants' compliance with their obligations under this Final Judgment and under the Stipulation and Order. The Monitoring Trustee shall file such reports with the United States and, as appropriate, this Court. To the extent that any such report contains information that the Monitoring Trustee deems confidential, that report shall not be filed in the public docket of this Court.

I. The Monitoring Trustee shall audit Defendants' compliance with Section IX every six (6) months. Defendants will provide full access to any documents and make employees available for interviews requested by the Monitoring Trustee pursuant to performing the semi-annual audit. The Monitoring Trustee shall file a report of the audit with the United States and, as appropriate, this Court. To the extent that any such report contains information that the Monitoring Trustee deems confidential, that report shall not be filed in the public docket of this Court.

J. The Monitoring Trustee shall serve until the sale of the Divestiture Assets is finalized pursuant to Section IV and the expiration of any agreement entered into pursuant to Paragraph IV(G) or Paragraph IV(H) or other agreements between Bayer and BASF that may affect the accomplishment of the purposes of this Final Judgment, unless the United States, in its sole discretion, terminates earlier or extends this period.

K. If the United States determines that the Monitoring Trustee has ceased to act or failed to act diligently or in a reasonably cost-effective manner, it may recommend this Court appoint a substitute Monitoring Trustee.

IX. *FIREWALL*

A. During the term of any agreement entered into pursuant to Paragraph IV(G) or Paragraph IV(H), Bayer and BASF shall implement and maintain reasonable procedures to prevent Shared Confidential Information from being disclosed by or through implementation and execution of these agreements to components or individuals within the respective companies involved in the marketing, distribution, or sale of competing products.

B. Bayer and BASF each shall, within twenty (20) business days of the entry of the Stipulation and Order, submit to the United States and the Monitoring Trustee a document setting forth in detail the procedures implemented to effect compliance with Section IX. Upon receipt of the document, the United States shall notify Bayer and BASF within twenty (20) business days whether, in its sole discretion, it approves of or rejects each party's compliance plan. In the event that Bayer's or BASF's compliance plan is rejected, the United States shall provide

Bayer or BASF, as applicable, the reasons for the rejection. Bayer or BASF, as applicable, shall be given the opportunity to submit, within ten (10) business days of receiving a notice of rejection, a revised compliance plan. If Bayer or BASF cannot agree with the United States on a compliance plan, the United States shall have the right to request that this Court rule on whether Bayer's and BASF's proposed compliance plan fulfills the requirements of Section IX.

C. Bayer and BASF shall:

(1) furnish a copy of this Final Judgment and related Competitive Impact Statement within sixty (60) calendar days of entry of the Final Judgment to (a) each officer, director, and any other employee that will receive Shared Confidential Information; and (b) each officer, director, and any other employee that is involved in (i) any contacts with the other companies that are parties to any agreement entered into pursuant to Paragraph IV(G) or Paragraph IV(H), or (ii) making decisions under any agreement entered into pursuant to Paragraph IV(G) or Paragraph IV(H);

(2) furnish a copy of this Final Judgment and related Competitive Impact Statement to any successor to a person designated in Paragraph IX(C)(1) upon assuming that position;

(3) annually brief each person designated in Paragraph IX(C)(1) and Paragraph IX(C)(2) on the meaning and requirements of this Final Judgment and the antitrust laws; and

(4) obtain from each person designated in Paragraph IX(C)(1) and Paragraph IX(C)(2), within thirty (30) calendar days of that person's receipt of the Final Judgment, a certification that he or she (a) has read and, to the best of his or her ability, understands and agrees to abide by the terms of this Final Judgment; (b) is not aware of any violation of the Final Judgment that has not been reported to the company; and (c) understands that any person's failure to comply with this Final Judgment may result in an enforcement action for civil or criminal contempt of court against each Defendant or any person who violates this Final Judgment.

X. *COMPLIANCE INSPECTION*

A. For the purposes of determining or securing compliance with this Final Judgment, or of any related orders such as any Stipulation and Order, or of determining whether the Final Judgment should be modified or vacated, and subject to any legally recognized privilege, from time to time authorized representatives of the United States Department of Justice, including consultants and other persons retained by the United States, shall, upon written request of an authorized representative of the Assistant Attorney General in charge of the Antitrust Division, and on reasonable notice to Defendants, be permitted:

(1) access during Defendants' office hours to inspect and copy, or at the option of the United States, to require Defendants to provide hard copy or electronic copies of, all books, ledgers, accounts, records, data, and documents in the possession, custody, or control of Defendants, related to any matters contained in this Final Judgment; and

(2) to interview, either informally or on the record, Defendants' officers, employees, or agents, who may have their individual counsel present, regarding such matters. The interviews shall be subject to the reasonable convenience of the interviewee and without restraint or interference by Defendants.

B. Upon the written request of an authorized representative of the Assistant Attorney General in charge of the Antitrust Division, Defendants shall submit written reports or responses to written interrogatories, under oath if requested, related to any of the matters contained in this Final Judgment as may be requested.

C. No information or documents obtained by the means provided in Section X shall be divulged by the United States to any person other than an authorized representative of the executive branch of the United States, except in the course of legal proceedings to which the United States is a party (including grand jury proceedings), or for the purpose of securing compliance with this Final Judgment, or as otherwise required by law.

D. If at the time information or documents are furnished by Defendants to the United States, Defendants shall represent and identify in writing the material in any such information or documents to which a claim of protection may be asserted under Rule 26(c)(l)(G) of the Federal Rules of Civil Procedure and mark each pertinent page of such material, ''Subject to claim of protection under Rule 26(c)(l)(G) of the Federal Rules of Civil Procedure,'' then the United States shall give Defendants ten (10) calendar days' notice prior to divulging such material in any legal proceeding (other than a grand jury proceeding).

XI. *NO REACQUISITION OR RECOMBINATION OF DIVESTITURE ASSETS*

Bayer may not reacquire any part of the Divestiture Assets during the term of this Final Judgment. Except for an acquisition pursuant to Paragraph IV(F)(2), BASF may not acquire from Bayer during the term of this Final Judgment any assets or businesses that compete with the Divestiture Assets. In addition, Bayer and BASF shall not, without the prior written consent of the United States, enter into any new Collaboration involving any of the Divestiture Assets or expand the scope of any existing Collaboration involving any of the Divestiture Assets during the term of this Final Judgment. The United States will notify Bayer and BASF of its decision within sixty (60) calendar days of receiving written notification from Bayer and BASF of the proposed new or expanded Collaboration. The decision whether or not to consent to a Collaboration shall be within the sole discretion of the United States.

XII. *NOTIFICATION OF FUTURE TRANSACTIONS*

A. For transactions that are not subject to the reporting and waiting period requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, 15 U.S.C. § 18a (the ''HSR Act''), Bayer and Monsanto shall not, without providing advanced notification to the United States, directly or indirectly acquire a financial interest, including through securities, loan, equity, or management interest, in any company that researches, develops, manufactures, or sells digital agriculture products or soybean, cotton, canola, or corn seeds or traits. In addition, Bayer and Monsanto shall not acquire any digital agriculture assets, any trait assets, or all or substantially all of the germplasm assets from any such company without providing advanced notification to the United States.

B. Such notification shall be provided to the United States in the same format as, and per the instructions relating to, the Notification and Report Form set forth in the Appendix to Part 803 of Title 16 of the Code of Federal Regulations as amended, except that the information requested in Items 5 through 8 of the instructions must be provided only about digital agriculture products or soybean, cotton, canola, or corn seeds or traits. Notification shall be provided at least thirty (30) calendar days prior to acquiring any such interest, and shall include, beyond what may be required by the applicable instructions, the names of the principal representatives of the parties to the agreement who negotiated the agreement, and any management or strategic plans discussing the proposed transaction. If within thirty (30) calendar days after notification, the United States makes a written request for additional information, Bayer and

Monsanto shall not consummate the proposed transaction or agreement until thirty (30) calendar days after submitting and certifying, in the manner described in Part 803 of Title 16 of the Code of Federal Regulations as amended, the truth, correctness, and completeness of all such additional information. Early termination of the waiting periods in this paragraph may be requested and, where appropriate, granted in the same manner as is applicable under the requirements and provisions of the HSR Act and rules promulgated thereunder. Section XII shall be broadly construed and any ambiguity or uncertainty regarding the filing of notice under Section XII shall be resolved in favor of filing notice.

XIII. *RETENTION OF JURISDICTION*

This Court retains jurisdiction to enable any party to this Final Judgment to apply to this Court at any time for further orders and directions as may be necessary or appropriate to carry out or construe this Final Judgment, to modify any of its provisions, to enforce compliance, and to punish violations of its provisions.

XIV. *ENFORCEMENT OF FINAL JUDGMENT*

A. The United States retains and reserves all rights to enforce the provisions of this Final Judgment, including its right to seek an order of contempt from this Court. Defendants agree that in any civil contempt action, any motion to show cause, or any similar action brought by the United States regarding an alleged violation of this Final Judgment, the United States may establish a violation of this Final Judgment and the appropriateness of any remedy therefor by a preponderance of the evidence, and they waive any argument that a different standard of proof should apply.

B. The Final Judgment should be interpreted to give full effect to the procompetitive purposes of the antitrust laws and to restore all competition harmed by the challenged conduct. Defendants agree that they may be held in contempt of, and that the Court may enforce, any provision of this Final Judgment that, as interpreted by the Court in light of these procompetitive principles and applying ordinary tools of interpretation, is stated specifically and in reasonable detail, whether or not it is clear and unambiguous on its face. In any such interpretation, the terms of the Final Judgment should not be construed against either party as the drafter.

C. In any enforcement proceeding in which the Court finds that the Defendants have violated this Final Judgment, the United States may apply to the Court for a one-time extension of this Final Judgment, together with such other relief as may be appropriate. In connection with any successful effort by the United States to enforce this Final Judgment against a Defendant, whether litigated or resolved prior to litigation, that Defendant agrees to reimburse the United States for any attorneys' fees, experts' fees, and costs incurred in connection with that enforcement effort, including the investigation of the potential violation.

XV. *EXPIRATION OF FINAL JUDGMENT*

Unless this Court grants an extension, this Final Judgment shall expire ten (10) years from the date of its entry, except that after six (6) years from the date of its entry, this Final Judgment may be terminated upon notice by the United States to the Court and Defendants that the divestitures have been completed and that the continuation of the Final Judgment no longer is necessary or in the public interest.

XVI. *PUBLIC INTEREST DETERMINATION*

Entry of this Final Judgment is in the public interest. The parties have complied with the requirements of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16, including making copies available to the public of this Final Judgment, the Competitive Impact Statement, and any comments thereon and the United States' responses to comments. Based upon the record before this Court, which includes the Competitive Impact Statement and any comments and responses to comments filed with this Court, entry of this Final Judgment is in the public interest.

Date:

[Court approval subject to procedures of Antitrust Procedures and Penalties Act, 15 U.S.C. § 16]

United States District Judge

Appendix A

1. Bayer will retain thirty (30) office facilities largely dedicated to non-divested Bayer businesses in Argentina (Buenos Aires and Chacabuco), Brazil (Paulinia), Canada (Calgary, Ottawa, Rosthern, Saskatoon, and Winnipeg), Czech Republic (Prague), France (two sites in Lyon), Germany (Langenfeld and Monheim), Great Britain (Cambridge), Greece (Athens and Thessaloniki), Hungary (Budapest), Latvia (Riga), Poland (Warsaw), Romania (Bucharest), Russia (Moscow), Turkey (Adana, Gebze, Istanbul, Izmir, and Sanliurfa), Ukraine (Kiev), and the United States (Champaign, Clayton, and Inaha).

2. Bayer will retain one seed cleaning and bagging facility that is part of Bayer Crop Science headquarters in Monheim, Germany (known as ''EOPC'').

3. Bayer will retain fourteen (14) formulation and filling sites largely dedicated to non-divested Bayer products in Argentina (Zarate), Australia (Kwinana and Pinkenba), Brazil (Belford Roxo), China (Hangzhou), Colombia (Barranquilla), Germany (Frankfurt), Guatemala (Amatitlán), Japan (Hofu), Korea (Daejeon), South Africa (Nigel), Spain (Quart de Poblet), Thailand (Bangpoo), and the United States (Kansas City).

4. Bayer will retain thirty-four (34) general office facilities largely dedicated to non-divested businesses in Algeria (Algiers), Argentina (Munro), Australia (Pinkenba), Belgium (Diegem), Canada (Guelph), Chile (Santiago de Chile), Colombia (Bogotá), Costa Rica (San José), Denmark (Copenhagen), Egypt (Cairo), Germany (Monheim), Great Britain (Saffron Walden), Guatemala (Mixco), Hungary (Budapest), Iran (Tehran), Japan (Fukuoka), Kazakhstan (Astana), Kenya (Nairobi), Morocco (Casablanca and El Jadida), Panama (David), Peru (Ica and Lima), Poland (Warsaw), Portugal (Carnaxide), Romania (Bucharest), Russia (Krasnodar), Singapore (Singapore), South Korea (Anseong-si), Spain (Paterna), Ukraine (Kiev), the United States (two sites in West Sacramento), and Vietnam (Hanoi).

Appendix B: Monsanto Population Numbers

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(419) JVK13352

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

United States of America, Plaintiff, v. *BAYER AG, MONSANTO COMPANY,* and *BASF SE,* Defendants.

Civil Action No.: 1:18–cv–1241
Judge James E. Boasberg

COMPETITIVE IMPACT STATEMENT

Pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act (''APPA'' or ''Tunney Act''), 15 U.S.C. § 16(b), Plaintiff United States of America files this Competitive Impact Statement relating to the proposed Final Judgment submitted on May 29, 2018, for entry in this civil antitrust proceeding.

I. NATURE AND PURPOSE OF THE PROCEEDING

On September 14, 2016, Defendant Bayer AG (''Bayer'') agreed to acquire Defendant Monsanto Company (''Monsanto'') in a merger valued at approximately $66 billion. The United States filed a civil antitrust Complaint against Bayer and Monsanto on May 29, 2018, seeking to enjoin the proposed merger. The Complaint alleges that the proposed merger would lessen competition substantially across various markets in the agricultural industry, resulting in higher prices, less innovation, fewer choices, and lower-quality products for American farmers and consumers, in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

Simultaneously with the filing of the Complaint, the United States has filed a proposed Final Judgment and a Stipulation and Order designed to prevent the merger's likely anticompetitive effects. As detailed below, the proposed Final Judgment requires Bayer to divest its businesses that compete with Monsanto, the seed treatment businesses that the merged firm would use to harm competition in certain seed markets, and assets supporting those businesses (collectively, the ''Divestiture Assets''). Bayer has agreed to divest the Divestiture Assets to BASF SE (''BASF''), a global chemical company with a multi-billion-dollar crop protection business.[1] The required divestitures will ensure that BASF replaces Bayer as an independent and vigorous competitor in each of the

[1] Bayer, Monsanto, and BASF are referred to collectively as ''Defendants.''

markets in which the proposed merger would otherwise lessen competition.

The terms of the Stipulation and Order require Defendants to take certain steps to ensure that, pending the required divestitures, all of the Divestiture Assets will be preserved and that Monsanto will continue to be operated independently as a separate business concern.

The United States and Defendants have stipulated that the proposed Final Judgment may be entered after compliance with the APPA. Entry of the proposed Final Judgment would terminate this action, although the Court would continue to retain jurisdiction to construe, modify, or enforce the provisions of the proposed Final Judgment and to punish violations thereof.

II. DESCRIPTION OF THE EVENTS GIVING RISE TO ALLEGED VIOLATION

A. The Defendants and the Merger

Bayer is a life-sciences company based in Leverkusen, Germany. The company employs nearly 100,000 people worldwide and has operations in nearly 80 countries. Bayer has three main business lines: (1) pharmaceuticals, (2) consumer health, and (3) agriculture, the last of which is the Bayer Crop Science division. Over the past decade, Bayer Crop Science has become one of the largest global agricultural firms. Today, its crop protection business is the second largest in the world, and its seeds and traits business is also among the world's largest. Bayer Crop Science generated almost $12 billion in annual revenues in 2017.

Monsanto is a leading producer of agricultural products based in St. Louis, Missouri. Over 20,000 people work for the company in almost 70 countries. Monsanto's innovative technologies have established it as a global leader in agriculture; today, it is the leading global producer of seeds and traits and is among the world's largest producers of crop protection products. In 2017, Monsanto had almost $15 billion in annual revenues.

On September 14, 2016, Bayer agreed to acquire Monsanto for approximately $66 billion. In recognition of the significant competitive concerns raised by the proposed merger, Bayer has agreed to divest agricultural assets valued at approximately $9 billion to BASF. As discussed in Section III.K, *infra,* BASF has agreed to be bound by the terms of the proposed Final Judgment.

B. The Competitive Effects of the Proposed Merger across Agricultural Markets in the United States

The Complaint alleges that the proposed merger would reduce competition in the United States in 17 distinct agricultural product markets. These markets fit into four broad categories: (1) genetically modified (''GM'') seeds and traits, (2) foundational herbicides, (3) seed treatments, and (4) vegetable seeds. In addition to anticompetitive effects in each of the product markets resulting from the loss of head-to-head competition or vertical foreclosure, the Complaint also alleges that the merger would have a significant impact on innovation. Without the merger, competition between Bayer and Monsanto would intensify as both companies pursue what the industry refers to as ''integrated solutions''—combinations of seeds, traits, and crop protection products, supported by digital farming technologies and other services. Without the proposed Final Judgment, that competition would be lost.

1. GM Seeds and Traits

Bayer and Monsanto are close competitors in the GM seeds and traits markets for three important U.S. row crops: cotton, canola, and soybeans. As described in the Complaint, the proposed merger would likely lead to a substantial lessening of competition in each of these markets, resulting in hundreds of millions of dollars in harm each year to American farmers and consumers.

Cotton is a major crop grown across the southern United States. Cotton seeds are widely used in vegetable oil, packaged foods, and animal feed, and cotton fibers are widely used in clothing. In 2017, U.S. farmers planted about 12 million acres of cotton accounting for over $800 million in seed purchases.

Canola is an important crop used in vegetable oil, packaged foods, biodiesel fuels, and animal feed. In the United States, canola is grown on approximately 1.7 million acres, mainly in North Dakota but also in several other states. GM canola seeds accounted for $83 million in domestic sales in 2016.

Soy is the second-largest crop grown in the United States. Soybeans are widely used in vegetable oil, packaged foods, and animal feed. In 2017, U.S. farmers planted almost 90 million acres of soybeans accounting for $4.64 billion in seed purchases.

A genetic trait is simply an attribute of a plant, such as being tall, short, or leafy. In most cases, plant traits derive from the plant's natural DNA; however, a small number of highly sophisticated biotechnology firms can insert DNA from other organisms into the DNA of a plant, giving the plant a desirable trait associated with that non-native DNA. A GM seed is a seed that contains DNA, and hence a desirable trait, of a different organism. Scientists have developed herbicide-tolerant traits that give crops the ability to withstand exposure to herbicides that would normally damage or kill them, allowing a farmer to spray the herbicide over an entire field and efficiently kill weeds without harming the crop. Scientists also have developed traits that make crops resistant to certain insect pests, allowing farmers to prevent these pests from damaging their crops while also reducing farmers' use of chemical insecticides. Today, more than 90% of the soybeans, cotton, and canola grown in the United States is grown from GM seeds.

a) Relevant Markets

As alleged in the Complaint, GM cotton seeds, GM canola seeds, and GM soybeans are each relevant product markets under Section 7 of the Clayton Act. In canola and soy, nearly all GM seeds contain herbicide-tolerant traits, but no seeds contain insect-resistant traits. In cotton, most GM seeds contain both herbicide-tolerant traits and insect-resistant traits (found on 98% and 88% of all cotton acres, respectively). The vast majority of farmers do not view conventional (*i.e.,* non-GM) seeds as a substitute for GM cotton, GM canola, or GM soybeans because GM seeds eliminate much of the labor and expense associated with more traditional means of weed and pest management, offer higher yields, and reduce soil erosion by decreasing tillage requirements. Accordingly, a hypothetical monopolist of any of these GM seeds markets could profitably raise prices.

The Complaint also alleges that insect-resistant traits for cotton and herbicide-tolerant traits for cotton, canola, and soybeans are relevant product markets under Section 7 of the Clayton Act. Again, the vast majority of farmers growing cotton, canola, and soybeans in the United States choose to purchase GM seeds and do not consider conventional seeds an acceptable alternative. Consequently, GM traits are necessary inputs for most seed companies, and a hypothetical monopolist of any of the trait markets listed above could profitably raise prices.

The Complaint alleges that the relevant geographic markets for these

GM seeds and traits markets are regional because seeds are tailored to local growing conditions (such as weather and soil type), and suppliers can charge different prices to customers in different regions. In cotton and canola, however, virtually all of the regions affected by the merger have similar market conditions, so the regions can reasonably be aggregated to a national level for purposes of analysis. For soybeans, the market structure differs across regions, and the relevant geographic market in which the merger will lead to harm is the southern United States, where Bayer has focused its soybean breeding program and been particularly successful.

b) Competitive Effects—GM Seeds

The market for GM cotton seeds in the United States is highly concentrated and would become significantly more so if Bayer were allowed to acquire Monsanto. Bayer and Monsanto have long been the two leading suppliers of GM cotton seeds throughout the United States. In addition to owning critical herbicide-tolerant and insect-resistant traits, discussed in more detail below, the companies each own extensive libraries of elite seed varieties, which are essential for breeding and commercializing competitive cotton seeds. If the proposed merger were allowed to proceed, Bayer and Monsanto would have a combined 59% share of GM cotton seeds in the United States.

In the market for GM canola seeds in the United States, Bayer and Monsanto are by far the two largest competitors, with a combined share of approximately 74%. Bayer and Monsanto compete aggressively, and Bayer's canola innovations in recent years have allowed it to surpass Monsanto, previously the largest firm in this market.

In the market for GM soybeans, the proposed merger would eliminate Bayer as a uniquely positioned challenger to Monsanto, which has dominated the market since traits were first commercialized in soybeans in the 1990s. For years, Monsanto's competitors relied on Monsanto for licenses to GM traits and, in most cases, for licenses to seed varieties as well. Bayer, however, invested over $250 million to develop an independent source of soybean varieties and launched its own branded soybean business, Credenz, which sells varieties that perform well in the southern United States. In 2017, Monsanto had a 39% market share in that region, with Bayer holding a 6% share that it planned to grow in the future.

Even these figures significantly understate the level of dominance the merged company would have in each of these markets. Monsanto licenses seeds with traits to certain smaller seed companies (referred to in the industry as ''independent seed companies''), leaving these smaller rivals with limited ability to exert competitive pressure on the merged firm.

c) Competitive Effects—GM Traits

In addition to effects in each GM seed market, the proposed merger would harm American farmers by eliminating head-to-head competition between Bayer and Monsanto to develop and sell GM traits. These trait markets are even more highly concentrated than the GM seed markets. Bayer and Monsanto effectively have a duopoly in cotton herbicide-tolerant traits, and the proposed merger would lead to a monopoly. In 2017, Bayer's herbicide-tolerant cotton traits accounted for 19% of the market, and Monsanto's accounted for 80%. The proposed merger would also lead to a substantial increase in concentration in the market for canola herbicide-tolerant traits; virtually all canola seeds planted in the United States contain either a Bayer or a Monsanto trait. In the soybean herbicide-tolerant trait market, Bayer has chipped away at Monsanto's position, and the merger threatens to eliminate Monsanto's only serious challenger. In 2017, Bayer and Monsanto represented 14% and 67% of the market, respectively, with the remainder attributable to market participants using an off-patent version of Monsanto's original Roundup Ready trait. Finally, the merger would also significantly increase concentration in the already highly concentrated market for insect-resistant traits for cotton; Bayer and Monsanto accounted for 10% and 75% of that market, respectively, in 2017.

Without the merger, competition between the two companies across the GM trait markets would likely increase over time. Bayer and Monsanto each have new traits in their research pipelines that would confer tolerance to additional herbicides, and farmers would benefit as Bayer and Monsanto continued to develop these new innovations.

d) Entry and Expansion in GM Seeds and Traits Markets

Entry is unlikely to counteract the anticompetitive effects of the proposed merger in any of the GM seed or GM trait markets. To compete in a GM seed market, a company must have high-quality varieties for the current growing season and access to a deep and diverse collection of high-quality seeds for breeding future varieties. The varieties must also be suitable for the particular geographic region. Elite seed varieties suitable for regions in the United States are increasingly difficult to procure and are controlled largely by a handful of vertically integrated companies, including Monsanto, Bayer, DowDuPont, and Syngenta. In addition, the time, expense, and expertise required to commercialize a GM trait is prohibitive for all but these four companies. Although certain smaller companies may participate in some limited aspect of initially discovering a trait, they do not have the ability to commercialize these traits.

2. Foundational Herbicides

In addition to competing to sell herbicide-tolerant seeds, Bayer and Monsanto also compete to sell the herbicides that are paired with them. Monsanto's Roundup Ready seeds are engineered to tolerate the herbicide glyphosate, which Monsanto sells under its Roundup brands, while Bayer's LibertyLink seeds are engineered to tolerate glufosinate ammonium, the herbicide that Bayer sells under the Liberty brand. These ''foundational'' herbicides, glyphosate and glufosinate, have unique characteristics that make them important competitive alternatives for farmers.

a) Relevant Market

The Complaint alleges that foundational herbicides constitute a relevant product market under Section 7 of the Clayton Act. Foundational herbicides are herbicides used on row crops that have two defining characteristics. First, they are ''non-selective,'' meaning that they kill all types of weeds, thus providing farmers with the broadest possible protection for their crops. In contrast, other types of herbicides are ''selective,'' meaning that they kill only certain types of weeds. Selective herbicides are often used to supplement non-selective herbicides but are not generally used in lieu of them. Second, foundational herbicides can be paired with seeds that are engineered to tolerate the herbicide. Other non-selective herbicides are not a substitute for farmers because no seeds are engineered to withstand them, so spraying those herbicides over a crop would damage it. For these reasons, farmers have no good substitutes for foundational herbicides, and a hypothetical monopolist would find it profitable to increase the price of some foundational herbicides by a small but significant amount. Today, glyphosate

and glufosinate are the only two foundational herbicides, but, as discussed further below, new foundational herbicides are in development.

b) Competitive Effects

The proposed merger would combine the world's leading producers of foundational herbicides and would lead to a presumptively anticompetitive increase in market concentration. Since the launch of herbicide-tolerant crops in the 1990s, Monsanto's Roundup has dominated the market. As some weeds have developed resistance to glyphosate, however, farmers are increasingly turning to Liberty. While glufosinate and glyphosate are now off patent, competition from generic suppliers has not prevented Bayer and Monsanto from maintaining branded price premiums. In 2017, Bayer held a 7% share and Monsanto held a 53% share, with generic manufacturers holding the remaining share.

The proposed merger is also likely to eliminate competition between Bayer and Monsanto to develop next-generation weed management systems. The Complaint explains that Bayer is developing new foundational herbicides and related herbicide-tolerant traits that would rival Monsanto's Roundup Ready-based systems. Likewise, Monsanto is actively pursuing innovations in foundational herbicides, including improvements to its Roundup formulations. Absent the merger, Bayer and Monsanto would each have incentives to pursue these competing pipeline products because any new innovations developed would help win market share from the other. In contrast, the merged firm will have different incentives due to heightened concerns that new innovations would simply cannibalize sales.

c) Entry and Expansion

As alleged in the Complaint, the anticompetitive effects of the proposed merger would not be remedied by entry or expansion in the foundational herbicide market. The manufacture of foundational herbicides is complex and hazardous, requiring regulatory and safety approvals, which are expensive and time-consuming to secure. Reputation, brand loyalty, and economies of scale also present barriers to entry and expansion.

3. Seed Treatments

Seed treatments are coatings applied to seeds that can protect the seed and the young plant from various insects or diseases. Seed treatments are a critical tool for farmers, and one or more seed treatments are applied to the majority of GM seeds sold in the United States today. Multiple seed treatments can be applied to a seed to protect it from various threats; seed treatments designed for one purpose (*e.g.,* killing insects) are rarely an effective substitute for seed treatments designed for a different purpose (*e.g.,* controlling fungal plant diseases).

The Complaint alleges that the proposed merger would likely result in three forms of competitive harm related to seed treatments: (1) the loss of head-to-head competition between Bayer's and Monsanto's seed treatments for nematodes, (2) vertical foreclosure effects resulting from the combination of Monsanto's strong position in corn seeds with Bayer's substantial position in insecticidal seed treatments for corn rootworm, and (3) vertical foreclosure effects resulting from the combination of Monsanto's strong position in soybeans with Bayer's substantial position in fungicidal seed treatments for soybean sudden death syndrome.

a) Nematicidal Seed Treatments for Corn, Cotton, and Soybeans

Nematicidal seed treatments protect crops from parasitic roundworms known as nematodes. Farmers have no cost-effective alternatives to nematicidal seed treatments. Seed treatments are approved for use by the government on a crop-by-crop basis, so a soybean farmer, for example, chooses between a different set of competitive alternatives than a cotton farmer. Accordingly, the Complaint alleges that nematicidal seed treatments for corn, cotton, and soybean seeds are each relevant markets under Section 7 of the Clayton Act and that a hypothetical monopolist in each market could profitably raise prices.

All three nematicidal seed treatment markets are highly concentrated. For years, Bayer has had a monopoly in the market for nematicidal seed treatments for corn; in 2017, its market share was over 95%. Bayer also dominates the market for nematicidal seed treatments for soybeans, with a share over 85%. And in the market for nematicidal seed treatments for cotton, Bayer and Syngenta currently split the market roughly evenly.

Although Monsanto does not currently sell any nematicidal seed treatments, it is about to launch its first product, NemaStrike. Without the merger, both Bayer and Monsanto expected NemaStrike to capture significant share from Bayer in all three seed treatment markets. The Complaint alleges that the proposed merger would harm competition in the nematicidal seed treatment market by removing the most significant threat to Bayer's dominance.

b) Vertical Foreclosure—Seed Treatments for Corn Rootworm and GM Corn Seeds

Corn is the largest crop grown in the United States, accounting for over $8 billion in seed sales annually. Over 90% of U.S. corn seeds are genetically modified, and, like the other GM seeds discussed above, GM corn seeds are a relevant product market under Section 7 of the Clayton Act. Although Bayer does not sell corn seeds, Monsanto effectively controls 50% of the market and faces only one major rival.

Corn rootworm is a destructive pest that can devastate a farmer's fields. To deal with this threat, some farmers rely on Bayer's Poncho insecticidal seed treatment. For many farmers, there are no cost-effective alternatives to insecticidal seed treatments. Because Poncho is the only seed treatment that offers meaningful protection against corn rootworm, corn seed companies purchase Bayer's insecticidal seed treatment to apply to their seeds so they can offer a competitive product.

The merger would likely harm competition in the market for GM corn seeds by combining Monsanto's strong position in GM corn seeds with Bayer's dominant position in insecticidal seed treatments for corn rootworm. The merged firm would have the incentive and ability to make its corn seed rivals less competitive by forcing them to pay more for Poncho or cutting off their supply of the product. This would limit farmers' choices, reduce competition, and ultimately allow the merged firm to increase the price for GM corn seeds.

c) Vertical Foreclosure—Fungicidal Seed Treatments for Sudden Death Syndrome and GM Soybeans

The merger is likely to have similar effects in soy. Sudden death syndrome (''SDS'') is a fungal disease afflicting millions of soybean acres across the United States. In 2015, Bayer began selling ILeVO, the only effective fungicidal seed treatment combatting SDS, and ILeVO's sales have doubled annually since its introduction. The merger is likely to reduce competition by combining Monsanto's leading GM soybean business with Bayer's dominant position in fungicidal seed treatments for SDS. The merged firm would have the incentive and ability to make its soybean rivals less competitive by charging them more for ILeVO or cutting off their supply, diminishing competition in the market for GM soybeans and reducing choices available to farmers.

d) Entry and Expansion

As alleged in the Complaint, the anticompetitive effects of the proposed merger would not be remedied by entry or expansion in the relevant seed treatment markets. Developing a new, effective seed treatment is a slow, costly, and difficult process, and new seed treatments require extensive regulatory approvals before farmers can use them. Generic versions of the Bayer seed treatments discussed above will not be available for at least the next several years due to various intellectual property protections. Neither expansion by existing seed treatments nor new seed treatments expected to launch in the next several years would prevent the anticompetitive effects of the proposed merger.

4. Vegetables

Finally, the Complaint alleges that the proposed merger is likely to substantially lessen competition in the markets for five types of vegetable seeds: carrots, cucumbers, onions, tomatoes, and watermelons. Overall, Monsanto is the largest global vegetable seed company, while Bayer is the fourth largest, and the two companies are strong competitors in all five of these markets.

a) Relevant Markets

The Complaint alleges that the seeds markets for carrots, cucumbers, onions, tomatoes, and watermelons each constitute a relevant market under Section 7 of the Clayton Act. Each vegetable species has unique characteristics, and other crops are not viable substitutes. Many vegetable seed customers rely on access to particular types of vegetables to operate their businesses. For example, in the United States, companies that sell pre-cut baby carrots and other carrot products, such as juice, purchase carrot seeds to grow their carrots. These companies are unlikely to begin growing a different crop in large quantities in response to a price increase. Nor are other farmers likely to switch crops in response to a price increase because they have invested in crop-specific facilities and equipment, possess specialized crop-specific knowledge, or live in an area best suited to growing that particular type of vegetable. A hypothetical monopolist of any of the five vegetable seed species would find it profitable to increase prices by at least a small but significant amount because the bulk of farmers would not switch away from their preferred vegetable crops in response. As vegetable seeds are bred to thrive in particular regions of the country, geographic markets are regional, but, similar to row crops, virtually all regions affected by the merger have similar market structure, so in this case it is appropriate to aggregate these regions to the national level for convenience.

b) Competitive Effects

Bayer and Monsanto are among the largest domestic producers of all the vegetable seeds at issue. The Complaint alleges that the proposed merger would significantly increase concentration in each market, and each market would be highly concentrated with few, if any, other significant competitors. In carrots and cucumbers, the merged firm would enjoy near-complete dominance, with market shares of 94% and 90%, respectively. The combined company would also have high market shares in onion seeds (71%) and tomato seeds (55%). In watermelon seeds, Bayer holds a 37% market share while Monsanto has a 6% share, with only one other significant competitor. Monsanto's market share in watermelon seeds understates its competitive significance; its recent introduction of competitive seedless watermelon varieties, which are in high demand and already offered by Monsanto's competitors, will likely significantly improve its position going forward. In each of these markets, the proposed merger would eliminate the significant competition between Bayer and Monsanto, not only on price, but also on quality and innovation, to the overall detriment of American farmers and consumers.

c) Entry and Expansion

Firms that sell vegetable seeds use modern breeding techniques that require access to advanced technologies and elite seed varieties, making entry challenging. In addition, entering a new vegetable seed market can be expensive and time consuming because successful vegetable seed companies must invest continuously in developing new, improved varieties, some of which can take over a decade to breed and commercialize. Certain vegetable markets present additional unique challenges; for instance, onions are among the hardest vegetable seeds to produce, in part, because they are biennials, generating seed only every other growing season.

III. EXPLANATION OF THE PROPOSED FINAL JUDGMENT

The proposed Final Judgment remedies the anticompetitive effects of the merger by requiring Bayer to divest its businesses in each relevant market, along with various supporting assets, to BASF, a global chemical company with an existing agricultural crop protection business. To ensure that BASF would replace Bayer as an effective competitor and innovator in each of the 17 markets in which the Complaint alleges that the proposed merger would harm competition, the United States carefully scrutinized the merging parties' and BASF's businesses and operations to identify a comprehensive package of businesses and supporting assets for divestiture. Collectively, these transfers encompass the suite of businesses and assets that constitute the divestiture package.

In evaluating the remedy, the United States recognized that fully preventing the competitive effects of a merger in some cases requires the inclusion of assets or projects that are beyond the affected relevant markets. As the *U.S. Department of Justice Antitrust Division Policy Guide to Merger Remedies* explains, the United States will exercise its enforcement discretion to accept a divestiture only when it is persuaded that the divested ''assets will create a viable entity that will effectively preserve competition.'' *See Antitrust Division Policy Guide to Merger Remedies* at 9 (June 2011) (available at https://www.justice.gov/atr/public/guidelines/272350.pdf). Because Bayer does not operate its businesses that compete with Monsanto as separate, standalone entities, to ensure effective relief the United States is also requiring the divestiture of assets that are complementary to the competitive products or that use shared resources. *See id.* at 11 (''[I]ntegrated firms can provide scale and scope economies that a purchaser may not be able to achieve by obtaining only those assets related to the relevant product(s).''). Finally, effective relief also requires divestiture of those ''pipeline'' research projects that Bayer is pursuing to ensure the future competitive significance of the divested businesses.

Guided by these principles, the United States identified a divestiture package that remedies the various dimensions of harm threatened by the proposed merger. First, the proposed Final Judgment requires Bayer to divest those businesses that vigorously compete head-to-head with Monsanto today. Second, to address certain vertical concerns, the proposed Final Judgment requires Bayer to divest seed treatment businesses that would give the combined company the incentive and ability to harm competition by raising the prices it charges rival seed companies. Third, because Bayer and Monsanto compete to develop new products and services for farmers, the

proposed Final Judgment requires the divestiture of associated intellectual property and research capabilities, including ''pipeline'' projects, to enable BASF to replace Bayer as a leading innovator in the relevant markets. Fourth, the proposed Final Judgment requires the divestiture of additional assets that will give BASF the scale and scope to compete effectively today and in the future.

Because many of the divested assets will be separated from Bayer's existing business units and incorporated into BASF, the proposed Final Judgment includes provisions aimed at ensuring that the assets are handed off in a seamless and efficient manner. To that end, Bayer is required to transfer existing third-party agreements and customer information to BASF, as well as to enter transition services agreements that ensure that BASF can continue to serve customers immediately upon completion of the divestitures. The transition services and interim supply agreements are time-limited to ensure that BASF will become fully independent of Bayer as soon as practicable. The proposed Final Judgment also requires Bayer to warrant that the assets being divested are sufficient for BASF to maintain the viability and competitiveness of the divested businesses following BASF's acquisition of the assets. In addition, it gives BASF a one-year window after closing to identify any additional assets that are reasonably necessary to ensure the continued competitiveness of the divested businesses. The United States will have the sole discretion to determine if Bayer must divest these additional assets. Finally, the proposed Final Judgment gives BASF the ability to hire all of the personnel from Bayer needed to support these businesses.

BASF is the only buyer the United States has evaluated and deemed suitable to resolve the range of competitive concerns raised by the merger. BASF already has extensive agricultural experience, but it lacks a seeds and traits business. Combining the businesses and assets being divested with BASF's existing portfolio will allow it to become an integrated player and an effective industry competitor to the merged company and the other integrated players. BASF will have full control over these divested businesses, including the ability to assign licenses and other rights.

In sum, the proposed remedies will ensure that BASF can step into Bayer's shoes, thereby preserving the competition that the merger would otherwise destroy. The monitoring trustee to be appointed will have close oversight over the divestitures to ensure they proceed efficiently (*see, infra,* Section III.H). And, as additional protection, the proposed Final Judgment includes robust mechanisms that will allow the United States and the Court to monitor the effectiveness of the relief and to enforce compliance.

A. GM Seeds and Traits

Section IV of the proposed Final Judgment requires Bayer to divest all assets used by Bayer's GM seeds and traits businesses in the United States, including Bayer's cotton, canola, and soybean seeds and traits businesses, as well as almost all of the assets associated with Bayer's other global GM seeds and traits businesses. Because Bayer and Monsanto are currently competing to introduce the next blockbuster trait or plant variety, BASF can replace Bayer as a competitor only if BASF obtains all the assets required to continue Bayer's legacy of innovation. This includes all assets needed to offer farmers the new products that Bayer was poised to commercialize in the coming years. Notably, BASF will receive all of Bayer's trait research centers (including facilities in Morrisville, North Carolina; Ghent, Belgium; and Astene, Belgium). The proposed Final Judgment also requires Bayer to transfer all intangible assets used by these businesses, such as patents, know-how, and licenses or permits issued by government agencies.

There are limited exceptions to Bayer's obligation to divest all of the assets used by its global GM seeds and traits businesses. Certain assets used exclusively to support a handful of Bayer's small seed businesses or research programs outside of the United States are excluded from the Divestiture Assets. These exceptions are related to (1) rice seed, which Bayer sells only in Asia; (2) Bayer's millet, mustard, and cotton seed businesses in India; (3) R&D programs for Brazilian sugarcane and European sugarbeets; and (4) Bayer's cotton seed business in South Africa. None of these is closely related to the divested U.S. seeds and traits businesses. Bayer will also retain a number of general office facilities that house employees of businesses not affected by the divestitures, as well as one seed cleaning and bagging facility in Germany that is part of Bayer's Crop Science headquarters.

The proposed Final Judgment also requires Bayer to provide BASF with certain complementary assets, which will give scale and scope benefits to the divested GM seeds and traits businesses, and supply agreements, which will allow BASF to maintain the competitiveness of those businesses as they are transitioned from Bayer.

First, the proposed Final Judgment requires divestiture of Bayer's R&D programs associated with wheat. Bayer does not currently sell wheat in the United States, but it has been pursuing wheat-related research to expand the scope of its global seeds and traits portfolio and sustain the level of R&D investment these businesses require. Because seed and trait innovations can often be applied across multiple crops, a broader seed and trait portfolio will provide the promise of higher returns on investment and increase the incentive to innovate. The proposed Final Judgment preserves the scope efficiencies that Bayer enjoys today by keeping these businesses together. Moreover, separating the wheat business from Bayer's other seeds and traits businesses would have required disentangling and dividing integrated operations and assets. For instance, Bayer's research facility in Ghent, Belgium is used to support R&D for wheat as well as other crops. By requiring the divestiture of Bayer's wheat R&D programs and related facilities, the proposed Final Judgment ensures that BASF has all of the tools needed to run the divested businesses and can leverage these common resources as effectively as Bayer does today.

Second, under Paragraph IV.G of the proposed Final Judgment, Bayer will supply BASF with the seed treatments Bayer currently applies to its row crop seeds for a period of up to two years, with extensions subject to approval by the United States. This will allow BASF to offer farmers the same combinations of seeds and seed treatments that Bayer offers today without interruption. During the term of these supply agreements, BASF will transition to using (1) its own seed treatments, (2) the seed treatments it is acquiring from Bayer pursuant to the proposed Final Judgment (discussed in more detail below), (3) seed treatments from alternate suppliers, or (4) a combination thereof.

Third, Paragraph IV.N of the proposed Final Judgment requires Bayer to divest certain groups of Monsanto soybeans used for research and breeding (referred to in the industry as ''germplasm''). As discussed in the Complaint, Bayer has aggressively challenged Monsanto in the soybean market, and planned to continue to expand. However, Bayer currently lacks soybeans suitable for the Midwest, an important soybean growing region in the United States. By providing BASF with a richer pool of genetic material, the proposed Final Judgment creates a strong incentive for

BASF to continue Bayer's efforts to disrupt the market and provide new benefits to farmers and consumers.

B. Foundational Herbicides

Section IV of the proposed Final Judgment also requires Bayer to divest assets relating to its foundational herbicides business. The proposed Final Judgment requires Bayer to divest all intellectual property related to glufosinate, the active ingredient in Bayer's Liberty herbicide, including intellectual property relating to mixtures of glufosinate with other chemicals. Bayer is also required to divest its R&D projects, which will incentivize BASF to continue to develop new innovations for farmers.

In addition, Bayer will be required to divest all facilities used to manufacture glufosinate. Bayer will also divest certain facilities used to ''formulate'' (*i.e.,* mix with water and other inactive ingredients) and package glufosinate to create Liberty for sale to customers. Specifically, the proposed Final Judgment requires Bayer to divest its large North American facilities in Regina, Canada and Muskegon, Michigan, which formulate and package a significant percentage of the Liberty sold in the United States. Because Bayer's global formulation facilities are also used for unrelated products not being divested and supply very little of the Liberty used in the United States, the proposed Final Judgment permits Bayer to retain some formulation facilities, most of which are located outside the United States. However, Paragraph IV.G of the proposed Final Judgment requires Bayer to enter into an agreement to formulate Liberty for BASF, at cost, for up to three years to ensure that BASF can meet farmer demand for the product during the transition. The proposed Final Judgment limits the duration of these formulation services to ensure that BASF will become fully independent of Bayer as soon as practicable.

In certain countries outside of the United States, the proposed Final Judgment also provides that Bayer will distribute glufosinate products on BASF's behalf for a limited period. This accommodation affects only a small portion of total glufosinate sales and ensures business continuity in those international jurisdictions in which BASF requires time to develop the business infrastructure or to secure the local regulatory authorizations necessary to sell the product. To encourage BASF to become fully independent from Bayer as soon as practicable, the proposed Final Judgment limits the duration of these services, and BASF can terminate these distribution contracts on a country-by-country basis as soon as it is able to distribute these products on its own.

C. Pipeline Herbicides

The proposed Final Judgment requires the divestiture of certain crop protection products that are complementary to Bayer's trait business. Today, Bayer engages in parallel research across its various seeds and crop protection businesses, developing new herbicides and new traits that confer tolerance to those herbicides. Bayer is motivated to pursue trait research in part because successful commercialization of a trait will generate additional returns through the sale of the associated herbicide, and vice versa. Therefore, Section IV of the proposed Final Judgment also requires Bayer to divest its R&D projects relating to ketoenole and N,O-chelator (''NOC'') herbicides. These herbicides, if successful, would be sold in conjunction with the ketoenole- and NOC-tolerant traits Bayer is developing, which also are being divested. By requiring divestiture of both the trait projects and the associated herbicide projects, the proposed Final Judgment preserves BASF's incentive to pursue these innovations.

The proposed Final Judgment also provides BASF full access to Bayer's Balance Bean herbicide. Bayer recently introduced BalanceGT soybeans, which contain a GM trait conveying tolerance to both glyphosate and isoxaflutole, a selective herbicide contained in Bayer's Balance Bean product. BalanceGT soybeans are poised to compete with Monsanto's herbicide-tolerant soybeans, but Balance Bean is not yet approved for spraying over the top of crops. The proposed Final Judgment requires Bayer to transfer intellectual property associated with its Balance Bean herbicide business to BASF; Paragraph IV.G gives BASF the option of entering a temporary isoxaflutole supply agreement with Bayer; and Paragraph IV.L commits Bayer to using best efforts to obtain the remaining regulatory approvals for use of isoxaflutole over the top of crops. These requirements ensure that BASF will have the same ability to offer farmers the combination of both the BalanceGT trait and the Balance Bean herbicide as Bayer would have if the merger had not occurred.

D. Seed Treatments

Section IV of the proposed Final Judgment also requires Bayer to divest assets relating to its seed treatment businesses. Collectively, these divestitures remedy the likely anticompetitive effects of the merger that would arise both from the horizontal combination of Bayer's and Monsanto's nematicidal seed treatments, as well as from the vertical integration of Bayer's dominant seed treatments and Monsanto's dominant seed businesses.

First, the proposed Final Judgment requires Bayer to divest all intellectual property associated with its Poncho, VOTiVO, and TWO.0 seed treatment brands. The Complaint alleges that the merged firm could use its control over Poncho, which is uniquely effective against corn rootworm, to disadvantage its corn seed rivals and diminish competition in the GM corn seed market. VOTiVO is an important nematicidal seed treatment for corn, soy, and cotton, and in combination with other divestitures described below, its divestiture to BASF remedies the merger's likely harm in the market for nematicidal seed treatments. Because VOTiVO and TWO.0 are each typically sold in combination with Poncho, divestiture of the intellectual property associated with all three products will allow BASF to offer American farmers the same packages of Poncho-branded seed treatments as Bayer does today.

The proposed Final Judgment also requires Bayer to divest intellectual property associated with its ILeVO and COPeO seed treatments, which are both based on the same active ingredient, fluopyram. ILeVO and COPeO protect soybeans and cotton seeds, respectively, from nematodes; ILeVO is also the first seed treatment to combat soybean SDS effectively. The ILeVO and COPeO divestitures, in combination with the divestiture of VOTiVO, will address the merger's likely harm in the markets for nematicidal seed treatments. The divestiture of ILeVO will also prevent Bayer from using its control over ILeVO to disadvantage Monsanto's soybean seed rivals and diminish competition in the market for GM soybean seeds, as alleged in the Complaint.

Bayer also will transfer all intellectual property used by these divested seed treatment businesses, including all patents, licenses, know-how, trade names, and data or information collected on the products. The only exception is patents related to fluopyram, which Bayer primarily uses in other non-seed treatment products, such as fungicides applied to foliage. Therefore, the proposed Final Judgment requires Bayer to provide BASF with a perpetual, royalty-free license for all patents related to the use of fluopyram in seed treatments. The proposed Final Judgment also requires Bayer to divest all R&D projects associated with these seed treatment products, as well as a

product in development that would expand and improve on these existing seed treatment businesses.

Paragraph IV.G of the proposed Final Judgment requires Bayer, at BASF's option, to toll manufacture the active ingredients used in the divested seed treatments for an initial period of up to two years, and to provide formulation and distribution services for the seed treatments for up to two years. With prior approval of the United States, certain of these arrangements may be extended for up to an additional four years. These agreements ensure that BASF can immediately replace Bayer as an effective competitor with the divested seed treatments. BASF has its own existing seed treatment businesses and will use the time under the agreements to prepare its own facilities to manufacture and distribute the seed treatments, or to arrange for other suppliers to do so.

E. Digital Agriculture

Section IV of the proposed Final Judgment also requires Bayer to divest its digital agriculture business to BASF. Currently, the leading global agricultural businesses project that the industry will move toward ''integrated solutions,'' which are combinations of traditional agricultural input products that are optimized for use with one another or combined with other services. These companies have described digital agriculture as the ''glue'' that binds the products together and the core of any future integrated solution. This trend has led them to develop digital agriculture products to protect their position in traditional agricultural markets, including GM seed markets. To provide BASF with the digital agriculture capabilities needed to replace Bayer as a competitor going forward, the proposed Final Judgment requires Bayer to divest all assets related to its digital agriculture portfolio and pipeline of products.

F. Vegetables

Finally, Section IV of the proposed Final Judgment requires Bayer to divest a comprehensive set of tangible and intangible assets representing Bayer's entire global vegetable seed business. Bayer's vegetable seed business operates under the Nunhems brand name, a business acquired by Bayer in 2002.

The assets to be divested include all of Bayer's vegetable seed breeding capabilities, which encompass 24 different crops (including tomatoes, onions, carrots, cucumbers, and watermelons, among others) and approximately 2,400 varieties. Additional assets to be divested include Bayer's worldwide headquarters in Nunhem, Netherlands, and all global R&D facilities, sales offices, and operations centers. This will provide BASF with the necessary assets and infrastructure to continue vigorously competing, innovating, and developing new vegetable varieties. All customer information, including lists, accounts, and credit records will also be transferred to ensure that existing customers receive uninterrupted service.

Bayer also will divest intangible assets currently used by the vegetable seed business. Critically, all intellectual property—including patents, licenses, and copyrights—will be transferred to BASF. In addition, BASF will receive research data relating to historic and current R&D efforts. These divestitures will allow BASF to develop new and innovative vegetable seeds for current and future customers.

G. Employees

As part of the divestitures, over four thousand Bayer employees who currently support the various divestiture businesses will become BASF employees. These employees will immediately bring critical business experience to BASF. As an added safeguard, Paragraph IV.E of the proposed Final Judgment provides BASF the right to hire additional personnel to ensure that BASF can become as effective a competitor and innovator as Bayer is today in each of the relevant markets. Bayer is required to make information available to BASF about the employees supporting the businesses and assets to be divested, subject to applicable privacy and confidentiality protections. BASF then will have the right to make offers of employment to these individuals. To ensure that BASF will have the ability to hire experienced personnel, the proposed Final Judgment prohibits Bayer from interfering with BASF's efforts to hire any Bayer or Monsanto employees with relevant expertise.

H. Monitoring Trustee

Section VIII of the proposed Final Judgment provides the United States the option to seek the appointment of a Monitoring Trustee subject to the Court's approval. The United States intends to recommend a trustee for the Court's approval. The person selected will have the necessary expertise and experience to ensure that competition continues unabated across the various markets. Given the scope of the required divestitures, it is critical that the trustee be in a position to review and resolve any issues that may arise beginning immediately after the divestitures are completed.

The Monitoring Trustee will ensure: (1) that Defendants expeditiously comply with all of their obligations and perform all of their responsibilities under the proposed Final Judgment and the Stipulation and Order, (2) that the Divestiture Assets remain economically viable, competitive, and ongoing businesses prior to being fully divested to BASF, and (3) that competition in the relevant businesses is maintained throughout the United States. The Monitoring Trustee will have the power and authority to monitor the Defendants' compliance with the terms of the proposed Final Judgment. The Monitoring Trustee also will have the authority to investigate complaints relating to Bayer and Monsanto's compliance with the proposed Final Judgment including, but not limited to, any complaints relating to the agreements Bayer and Monsanto have or will enter into with BASF. The Monitoring Trustee will have access to all personnel, books, records, and information necessary to monitor Defendants' compliance with the proposed Final Judgment, and will serve at the cost and expense of Bayer.

The Monitoring Trustee will file reports every 30 days with the United States and, as appropriate, the Court until the completion of the required divestitures. The reports will set forth the efforts by Bayer and Monsanto to comply with their obligations under the proposed Final Judgment and the Stipulation and Order. After completion of the divestitures, the Monitoring Trustee will provide reports as requested by the United States.

I. Firewall

Section IX of the proposed Final Judgment requires Bayer and BASF to implement firewall procedures to prevent each company's confidential business information from being used by the other for any purpose that could harm competition. Within twenty days of the Court approving the Stipulation and Order, Bayer and Monsanto must submit their planned procedures for maintaining firewalls. Additionally, Bayer and BASF must explain the requirements of the firewalls to certain officers and other business personnel responsible for the commercial relationships between the two companies about the required treatment of confidential business information. Bayer's and BASF's adherence to these procedures is subject to a semi-annual audit by the Monitoring Trustee. These measures are necessary to ensure that the supply and transition services

agreements between Bayer and BASF do not facilitate coordination or other anticompetitive behavior during the interim period before BASF becomes fully independent of Bayer.

J. Prohibition on Recombinations

To ensure that BASF and Bayer remain independent competitors, Section XI of the proposed Final Judgment prohibits Bayer and BASF from recombining any of the Divestiture Assets with competing Bayer businesses. First, Bayer is prohibited from reacquiring any of the Divestiture Assets during the term of the Final Judgment. Second, BASF may not acquire from Bayer any assets or businesses that compete with the Divestiture Assets. These provisions ensure that Bayer and BASF cannot undermine the purpose of the proposed Final Judgment by later entering into a new transaction that would reduce the competition that the divestitures have preserved. Finally, Section XI prohibits Bayer and BASF from entering into any new collaboration, such as a research and development joint venture, or from expanding the scope of any existing collaboration, involving the Divestiture Assets. This provision prevents Bayer and BASF from circumventing the purpose of the proposed Final Judgment by, for example, entering into a partnership to jointly develop new traits, which could reduce or eliminate BASF's incentive to innovate independently in some or all of the relevant markets. The provision permits BASF and Bayer to engage in certain ordinary-course-of-business commercial relationships, such as crop protection product supply agreements. They also may engage in other collaborations if approved by the United States in its sole discretion.

K. Enforcement Provisions

The proposed Final Judgment contains provisions designed to promote compliance and make the enforcement of consent decrees as effective as possible. As set forth in the Stipulation and Order, BASF has agreed to be joined to this action for purposes of the divestiture. Including BASF is appropriate because, after extensive analysis, the United States has determined that BASF is a necessary party to effectuate complete relief; the divestiture package was crafted specifically taking into consideration BASF's existing assets and capabilities, and divesting the package to another purchaser would not preserve competition. Thus, as discussed above, the proposed Final Judgment imposes certain obligations on BASF to ensure that the divestitures take place expeditiously and that BASF and Bayer reduce entanglements as quickly as possible after BASF acquires the Divestiture Assets.

Paragraph XIV.A provides that the United States retains and reserves all rights to enforce the provisions of the proposed Final Judgment, including rights to seek an order of contempt from the Court. Under the terms of this Paragraph, all Defendants, including BASF, have agreed that in any civil contempt action, any motion to show cause, or any other similar action brought by the United States regarding an alleged violation of the Final Judgment, the United States may establish the violation and the appropriateness of any remedy by a preponderance of the evidence, and that the Defendants have waived any argument that a different standard of proof should apply. This provision aligns the standard for compliance obligations with the standard of proof that applies to the underlying offense that the compliance commitments address.

Paragraph XIV.B provides additional clarification regarding the interpretation of the provisions of the proposed Final Judgment. The proposed Final Judgment was drafted to restore all competition that would otherwise be harmed by the merger. The Defendants agree that they will abide by the proposed Final Judgment, and that they may be held in contempt of this Court for failing to comply with any provision of the proposed Final Judgment that is stated specifically and in reasonable detail, as interpreted in light of this procompetitive purpose.

Paragraph XIV.C of the proposed Final Judgment further provides that should the Court find in an enforcement proceeding that the Defendants have violated the Final Judgment, the United States may apply to the Court for a one-time extension of the Final Judgment, together with such other relief as may be appropriate. In addition, in order to compensate American taxpayers for any costs associated with the investigation and enforcement of violations of the proposed Final Judgment, Paragraph XIV.C provides that in any successful effort by the United States to enforce this Final Judgment against a Defendant, whether litigated or resolved prior to litigation, that Defendant agrees to reimburse the United States for attorneys' fees, experts' fees, or costs incurred in connection with any enforcement effort, including the investigation of the potential violation.

Finally, Section XV of the proposed Final Judgment provides that the Final Judgment will expire ten years from the date of its entry, except that after six (6) years from the date of its entry, the Final Judgment may be terminated upon notice by the United States to the Court and Defendants that the divestitures have been completed and that the continuation of the Final Judgment is no longer necessary or in the public interest.

L. Stipulation and Order

Bayer, Monsanto, and BASF have entered into the Stipulation and Order, which was filed with the Court at the same time as the Complaint, to ensure that, pending the divestitures, the Divestiture Assets are maintained such that the divestitures will be effective. The Stipulation and Order also requires Bayer to hold Monsanto as a separate entity until the divestitures are complete, so that the merger can be unwound if Bayer fails to complete the required divestitures to BASF. This step is necessary in this case because the divestiture package was crafted specifically taking into consideration BASF's existing assets and capabilities, and if BASF is unable to acquire the assets, simply divesting the package to another purchaser would not preserve competition. The Stipulation and Order also binds all three defendants to the terms of the proposed Final Judgment pending the Judgment's entry by the Court.

IV. REMEDIES AVAILABLE TO POTENTIAL PRIVATE LITIGANTS

Section 4 of the Clayton Act, 15 U.S.C. § 15, provides that any person who has been injured as a result of conduct prohibited by the antitrust laws may bring suit in federal court to recover three times the damages the person has suffered, as well as costs and reasonable attorneys' fees. Entry of the proposed Final Judgment will neither impair nor assist the bringing of any private antitrust damages action. Under the provisions of Section 5(a) of the Clayton Act, 15 U.S.C. § 16(a), the proposed Final Judgment has no prima facie effect in any subsequent lawsuit that may be brought against Defendants.

V. PROCEDURES AVAILABLE FOR MODIFICATION OF THE PROPOSED FINAL JUDGMENT

The United States and Defendants have stipulated that the proposed Final Judgment may be entered by the Court after compliance with the provisions of the APPA, provided that the United States has not withdrawn its consent. The APPA conditions entry upon the Court's determination that the proposed Final Judgment is in the public interest.

The APPA provides a period of at least 60 days preceding the effective date of the proposed Final Judgment within which any person may submit to the United States written comments regarding the proposed Final Judgment. Any person who wishes to comment should do so within 60 days of the date of publication of this Competitive Impact Statement in the **Federal Register**, or the last date of publication in a newspaper of the summary of this Competitive Impact Statement, whichever is later. All comments received during this period will be considered by the United States, which remains free to withdraw its consent to the proposed Final Judgment at any time prior to the Court's entry of judgment. The comments and the response of the United States will be filed with the Court. In addition, comments will be posted on the Antitrust Division's internet website and, in certain circumstances, published in the **Federal Register**.

Written comments should be submitted by mail to:

Kathleen S. O'Neill
Chief, Transportation, Energy & Agriculture Section
Antitrust Division
United States Department of Justice
450 5th Street, NW, Suite 8000
Washington, DC 20530

The proposed Final Judgment provides that the Court retains jurisdiction over this action, and the parties may apply to the Court for any necessary or appropriate modification, interpretation, or enforcement of the Final Judgment.

VI. ALTERNATIVES TO THE PROPOSED FINAL JUDGMENT

The United States considered, as an alternative to the proposed Final Judgment, seeking preliminary and permanent injunctions against the merger and proceeding to a full trial on the merits. The United States is satisfied, however, that the relief in the proposed Final Judgment will preserve competition in each relevant market in the United States. Thus, the proposed Final Judgment will protect competition as effectively as, and will achieve all or substantially all of the relief the United States would have obtained through, litigation, but avoids the time, expense, and uncertainty of a full trial on the merits.

VII. STANDARD OF REVIEW UNDER THE APPA FOR THE PROPOSED FINAL JUDGMENT

The Clayton Act, as amended by the APPA, requires that proposed consent judgments in antitrust cases brought by the United States be subject to a 60-day comment period, after which the court shall determine whether entry of the proposed Final Judgment ''is in the public interest.'' 15 U.S.C. § 16(e)(1). In making such a determination, the court, in accordance with the statute as amended in 2004, is required to consider:

> (A) the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration of relief sought, anticipated effects of alternative remedies actually considered, whether its terms are ambiguous, and any other competitive considerations bearing upon the adequacy of such judgment that the court deems necessary to a determination of whether the consent judgment is in the public interest; and
>
> (B) the impact of entry of such judgment upon competition in the relevant market or markets, upon the public generally and individuals alleging specific injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial.

15 U.S.C. § 16(e)(1)(A) & (B). In considering these statutory factors, the court's inquiry is necessarily a limited one as the government is entitled to ''broad discretion to settle with the defendant within the reaches of the public interest.'' *United States* v. *Microsoft Corp.,* 56 F.3d 1448, 1461 (D.C. Cir. 1995); *see generally United States* v. *SBC Commc'ns, Inc.,* 489 F. Supp. 2d 1, 15–17 (D.D.C. 2007) (assessing public interest standard under the Tunney Act); *United States* v. *U.S. Airways Group, Inc.,* 38 F. Supp. 3d 69, 75 (D.D.C. 2014) (explaining that the ''court's inquiry is limited'' in Tunney Act settlements); *United States* v. *InBev N.V./S.A.,* No. 08–1965 (JR), 2009–2 Trade Cas. (CCH) ¶ 76,736, 2009 U.S. Dist. LEXIS 84787, at *3, (D.D.C. Aug. 11, 2009) (noting that the court's review of a consent judgment is limited and only inquires ''into whether the government's determination that the proposed remedies will cure the antitrust violations alleged in the complaint was reasonable, and whether the mechanisms to enforce the final judgment are clear and manageable'').[2]

As the United States Court of Appeals for the District of Columbia Circuit has held, under the APPA a court considers, among other things, the relationship between the remedy secured and the specific allegations set forth in the government's complaint, whether the decree is sufficiently clear, whether enforcement mechanisms are sufficient, and whether the decree may positively harm third parties. *See Microsoft,* 56 F.3d at 1458–62. With respect to the adequacy of the relief secured by the decree, a court may not ''engage in an unrestricted evaluation of what relief would best serve the public.'' *United States* v. *BNS, Inc.,* 858 F.2d 456, 462 (9th Cir. 1988) (quoting *United States* v. *Bechtel Corp.,* 648 F.2d 660, 666 (9th Cir. 1981)); *see also Microsoft,* 56 F.3d at 1460–62; *United States* v. *Alcoa, Inc.,* 152 F. Supp. 2d 37, 40 (D.D.C. 2001); *InBev,* 2009 U.S. Dist. LEXIS 84787, at *3. Courts have held that:

> [t]he balancing of competing social and political interests affected by a proposed antitrust consent decree must be left, in the first instance, to the discretion of the Attorney General. The court's role in protecting the public interest is one of insuring that the government has not breached its duty to the public in consenting to the decree. The court is required to determine not whether a particular decree is the one that will best serve society, but whether the settlement is ''*within the reaches of the public interest.*'' More elaborate requirements might undermine the effectiveness of antitrust enforcement by consent decree.

Bechtel, 648 F.2d at 666 (emphasis added) (citations omitted).[3] In determining whether a proposed settlement is in the public interest, a court ''must accord deference to the government's predictions about the efficacy of its remedies, and may not require that the remedies perfectly match the alleged violations.'' *SBC Commc'ns,* 489 F. Supp. 2d at 17; *see also U.S. Airways,* 38 F. Supp. 3d at 75 (noting that a court should not reject the proposed remedies because it believes others are preferable); *Microsoft,* 56 F.3d at 1461 (noting the need for courts to be ''deferential to the government's predictions as to the effect of the proposed remedies''); *United States* v. *Archer-Daniels-Midland Co.,* 272 F. Supp. 2d 1, 6 (D.D.C. 2003) (noting that the court should grant due respect to the United States' prediction as to the effect

[2] The 2004 amendments substituted ''shall'' for ''may'' in directing relevant factors for courts to consider and amended the list of factors to focus on competitive considerations and to address potentially ambiguous judgment terms. *Compare* 15 U.S.C. § 16(e) (2004), *with* 15 U.S.C. § 16(e)(1) (2006); *see also SBC Commc'ns,* 489 F. Supp. 2d at 11 (concluding that the 2004 amendments ''effected minimal changes'' to Tunney Act review).

[3] *Cf. BNS,* 858 F.2d at 464 (holding that the court's ''ultimate authority under the [APPA] is limited to approving or disapproving the consent decree''); *United States* v. *Gillette Co.,* 406 F. Supp. 713, 716 (D. Mass. 1975) (noting that, in this way, the court is constrained to ''look at the overall picture not hypercritically, nor with a microscope, but with an artist's reducing glass''). *See generally Microsoft,* 56 F.3d at 1461 (discussing whether ''the remedies [obtained in the decree are] so inconsonant with the allegations charged as to fall outside of the 'reaches of the public interest' '').

of proposed remedies, its perception of the market structure, and its views of the nature of the case).

Courts have greater flexibility in approving proposed consent decrees than in crafting their own decrees following a finding of liability in a litigated matter. ''[A] proposed decree must be approved even if it falls short of the remedy the court would impose on its own, as long as it falls within the range of acceptability or is 'within the reaches of public interest.''' *United States* v. *Am. Tel. & Tel. Co.*, 552 F. Supp. 131, 151 (D.D.C. 1982) (citations omitted) (quoting *United States* v. *Gillette Co.,* 406 F. Supp. 713, 716 (D. Mass. 1975)), *aff'd sub nom. Maryland* v. *United States,* 460 U.S. 1001 (1983); *see also U.S. Airways,* 38 F. Supp. 3d at 76 (noting that room must be made for the government to grant concessions in the negotiation process for settlements (citing *Microsoft,* 56 F.3d at 1461)); *United States* v. *Alcan Aluminum Ltd.,* 605 F. Supp. 619, 622 (W.D. Ky. 1985) (approving the consent decree even though the court would have imposed a greater remedy). To meet this standard, the United States ''need only provide a factual basis for concluding that the settlements are reasonably adequate remedies for the alleged harms.'' *SBC Commc'ns,* 489 F. Supp. 2d at 17.

Moreover, the court's role under the APPA is limited to reviewing the remedy in relationship to the violations that the United States has alleged in its complaint, and does not authorize the court to ''construct [its] own hypothetical case and then evaluate the decree against that case.'' *Microsoft,* 56 F.3d at 1459; *see also U.S. Airways,* 38 F. Supp. 3d at 75 (noting that the court must simply determine whether there is a factual foundation for the government's decisions such that its conclusions regarding the proposed settlements are reasonable); *InBev,* 2009 U.S. Dist. LEXIS 84787, at *20 (''[T]he 'public interest' is not to be measured by comparing the violations alleged in the complaint against those the court believes could have, or even should have, been alleged.''). Because the ''court's authority to review the decree depends entirely on the government's exercising its prosecutorial discretion by bringing a case in the first place,'' it follows that ''the court is only authorized to review the decree itself,'' and not to ''effectively redraft the complaint'' to inquire into other matters that the United States did not pursue. *Microsoft,* 56 F.3d at 1459–60. As a court in this district confirmed in *SBC Communications,* courts ''cannot look beyond the complaint in making the public interest determination unless the complaint is drafted so narrowly as to make a mockery of judicial power.'' 489 F. Supp. 2d at 15.

In its 2004 amendments, Congress made clear its intent to preserve the practical benefits of utilizing consent decrees in antitrust enforcement, adding the unambiguous instruction that ''[n]othing in this section shall be construed to require the court to conduct an evidentiary hearing or to require the court to permit anyone to intervene.'' 15 U.S.C. § 16(e)(2); *see also U.S. Airways,* 38 F. Supp. 3d at 76 (indicating that a court is not required to hold an evidentiary hearing or to permit intervenors as part of its review under the Tunney Act). The language wrote into the statute what Congress intended when it enacted the Tunney Act in 1974, as Senator Tunney explained: ''[t]he court is nowhere compelled to go to trial or to engage in extended proceedings which might have the effect of vitiating the benefits of prompt and less costly settlement through the consent decree process.'' 119 Cong. Rec. 24,598 (1973) (statement of Sen. Tunney). Rather, the procedure for the public interest determination is left to the discretion of the court, with the recognition that the court's ''scope of review remains sharply proscribed by precedent and the nature of Tunney Act proceedings.'' *SBC Commc'ns,* 489 F. Supp. 2d at 11.[4] A court can make its public interest determination based on the competitive impact statement and response to public comments alone. *U.S. Airways,* 38 F. Supp. 3d at 76.

VIII. DETERMINATIVE DOCUMENTS

There are no determinative materials or documents within the meaning of the APPA that were considered by the United States in formulating the proposed Final Judgment.

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Respectfully Submitted,

Scott I. Fitzgerald
Robert A. Lepore
Katherine A. Celeste
Jeremy Evans (D.C. Bar #478097)
Attorneys for the United States
U.S. Department of Justice
Antitrust Division
450 5th Street, NW, Suite 8000
Washington, DC 20530
Tel.: (202) 353–3863
Fax: (202) 616–2441
E-mail: *scott.fitzgerald@usdoj.gov*

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[4] *See United States* v. *Enova Corp.,* 107 F. Supp. 2d 10, 17 (D.D.C. 2000) (noting that the ''Tunney Act expressly allows the court to make its public interest determination on the basis of the competitive impact statement and response to comments alone''); *United States* v. *Mid-Am. Dairymen, Inc.,* No. 73–CV–681–W–1, 1977–1 Trade Cas. (CCH) ¶ 61,508, at 71,980, *22 (W.D. Mo. 1977) (''Absent a showing of corrupt failure of the government to discharge its duty, the Court, in making its public interest finding, should . . . carefully consider the explanations of the government in the competitive impact statement and its responses to comments in order to determine whether those explanations are reasonable under the circumstances.''); S. Rep. No. 93–298, at 6 (1973) (''Where the public interest can be meaningfully evaluated simply on the basis of briefs and oral arguments, that is the approach that should be utilized.'').